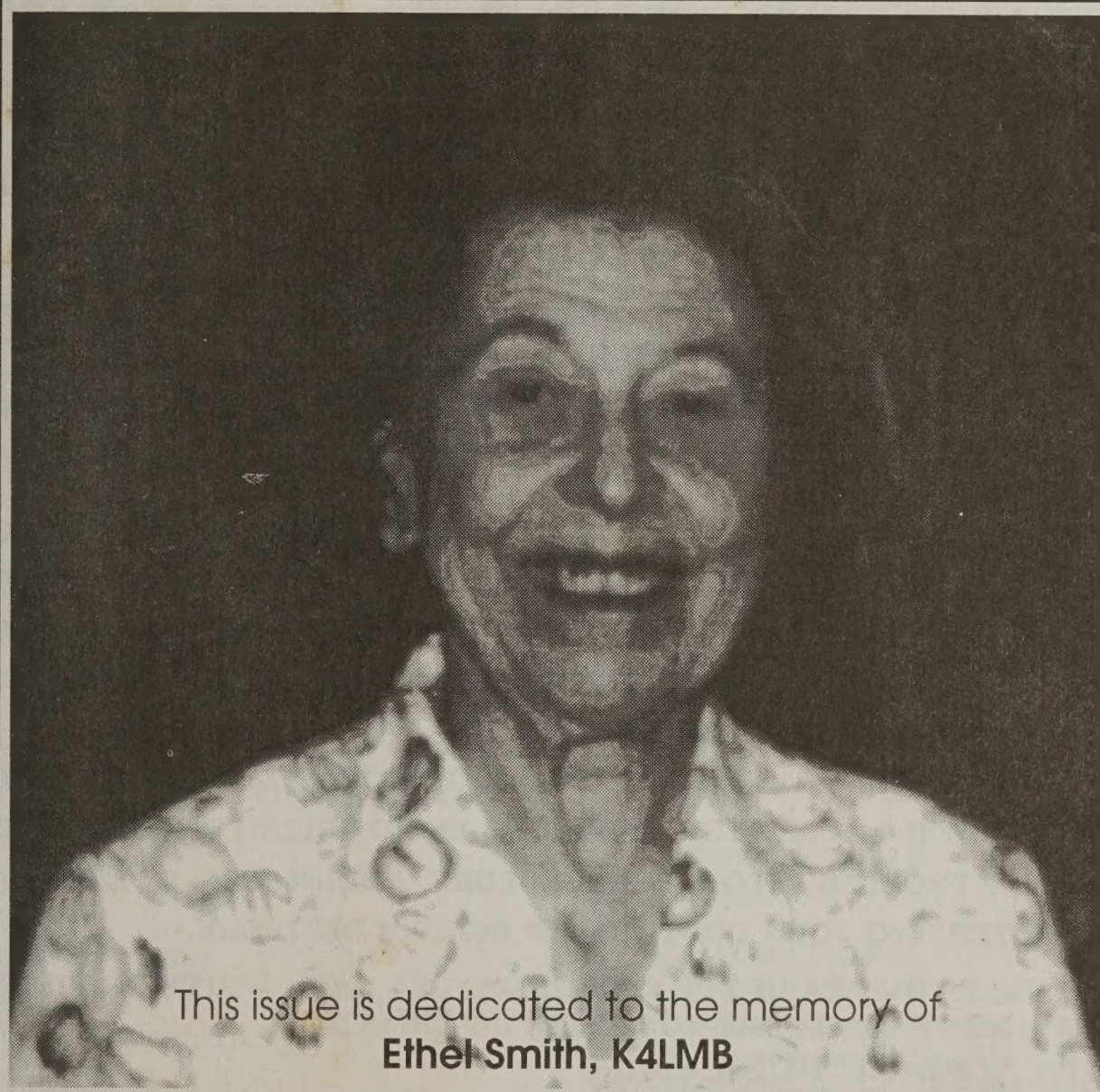




*The Official Journal of the Foundation For Amateur Radio, Inc.*

**MARCH 1997**



This issue is dedicated to the memory of  
**Ethel Smith, K4LMB**



**Rules and Regs • ARRL Report • VE Exams Schedule  
Public Service Report • DX Column • Regional Hamfests  
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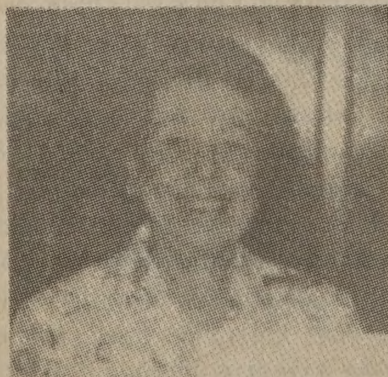
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# Regional Hamfests and Other Events

March 1	Black Warrior Swapfest, Tuscaloosa, AL	205-339-7882
March 1	NE Georgia Bubba Net, Athens, GA	706-742-2777
March 1	Split Rock ARA/West Morris Wire., Parsippany, NJ	201-584-5399
March 8	Kentucky Mountains ARC, Hazard, KY	606-436-5354
March 8-9	Roanoke Division Convention, Charlotte, NC	704-948-7373
March 9	Great South Bay ARC, Lindenhurst, NY	516-957-0218
March 15	Kennehoochee ARC, Marietta, GA	770-977-4405
March 15	Kerbela AR Service, Knoxville, TN	423-986-9562
March 16	Keystone VHF Club, York, PA	717-764-4805
March 16	Charleston Area Hamfest, Charleston, WV	304-768-1142
March 23	Delaware Valley Radio Assn., Trenton, NJ	609-882-2240
March 23	Down East Hamfest Assn., Kinston, NC	919-524-5724
June 7	Champlain Valley ARC, Plattsburgh, NY	518-563-6851
June 8	Long Island Mobile ARC, Bethpage, NY	516-796-2366
June 8	Goodyear ARC, Akron, OH	330-733-5795
June 14	Skyline ARC, Cortland, NY	607-753-0597
June 15	Frederick ARC, Frederick, MD	301-865-0865
June 21	Raritan Valley RC, Dunellen, NJ	908-722-9045
June 21	Hanover Area Hamming Assn., Pleasant Hill, PA	410-239-8451
June 21-22	Georgia State Convention, Atlanta, GA	770-493-8438
June 28-29	Field Day	
July 5	North Carolina Alligators Group, Salisbury, NC	704-279-3391
July 6	Murgas ARC, Wilkes-Barre, PA	717-288-3532
July 13	Genesee Radio Amateurs, Alexander, NY	716-343-4484
July 13	Mid-Atlantic ARC, Kimberton, PA	610-293-1919
July 26	Western Carolina ARS, Waynesville, NC	704-258-2639
July 27	Baltimore RA Television Society, Timonium, MD	410-467-4634
August 2	High Point ARC, High Point, NC	910-887-3039
August 3	Shenandoah Valley ARC, Berryville, VA	
August 9	Tompkins County ARC, Dryden, NY	607-844-4302
August 16	Roanoke Valley ARC, Roanoke, VA	540-890-6782
August 16-17	York ARC/Keystone VHF Club, York, PA	717-751-9675



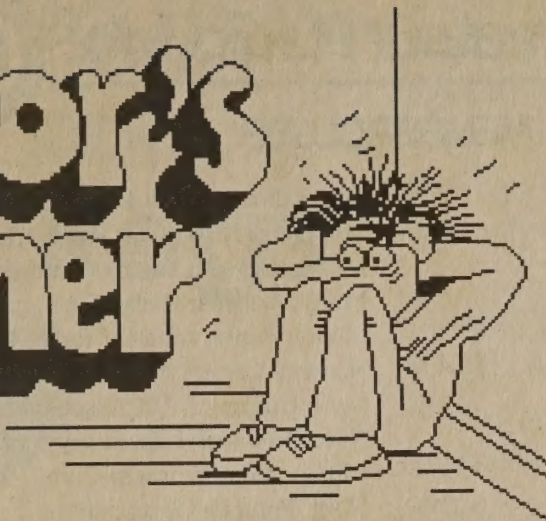
## On The Cover

Pictured on this month's issue of *Auto Call* is Ethel Smith, K4LMB, silent key. Ethel was a long time Editor of *AutoCall* magazine and served faithfully with the Foundation for Amateur Radio for many years. This issue is dedicated to the memory of Ethel.



# Editor's Corner

By John Queen  
KAØSEY



I am saddened to report that Ethel Smith, K4LMB became a silent key on February 4, 1997 at the age of 79.

Long time readers of *Auto Call* will remember that Ethel served as editor of this magazine for most of the period between 1971 and 1992. Ethel's devotion to *Auto Call* was only exceeded by her love for ham radio. Having earned her amateur license at the age of 18, Ethel spent the next 60 years serving the amateur radio community on numerous boards, committees, and offices.

Ethel helped form the Foundation for Amateur Radio, served as the Virginia SEC, and as an ARRL Assistant Director under four different Roanoke Division directors. She was the recipient of many amateur radio awards and recognitions including being named the Ham of the Year by the

Foundation for Amateur Radio in 1993.

Yet through it all, Ethel remained active in ham radio operations. At the ripe young age of 78, Ethel earned her Amateur Extra class license.

Although I spoke with her on the phone several times, I only met Ethel once. It was around the time that I took over the editorship of *Auto Call* two years ago. I remember meeting a very vibrant and dynamic lady who had a soft smile matched only by her warmth and charm. She asked me to take good care of *Auto Call* and wished me luck as the new editor.

Ethel, I hope I haven't let you down. This issue is dedicated to you. Your amateur radio friends will always remember you...

73's, de KAØSEY, John

## Foundation for Amateur Radio Adopt-A-School Program

The Adopt-A-School program was created to help local schools maintain on-the-air Amateur Radio activities in support of science, technology and social studies curriculums. The program matches schools with a transceiver and power supply. At the same time, each school is matched with a sponsoring Amateur Radio club in the local area. Please help support this very worthwhile program by donating or loaning used equipment. For more information on this program contact:

**FAR "Adopt-A-School" Program, c/o Pat Kilroy, WD8LAQ  
P.O. Box 1520, Bowie, MD 20717-1520**





## MEMBER CLUBS

Adams County Amateur Radio Society  
Alexandria Radio Club  
Amateur Radio Research and Develop. Corp.  
AMSAT - Radio Amateur Satellite Corporation  
Anne Arundel Radio Club  
Antietam Radio Association, Inc.  
ARINC Amateur Radio Club  
Arlington Amateur Radio Club  
Baltimore Amateur Radio Club  
Baltimore Radio Amateur Television Society  
Capital City Amateur Radio Society  
Capital Hill Amateur Radio Society  
Carroll County Amateur Radio Club  
Central Maryland Amateur Radio Club  
Chaverim of the Greater Washington Area  
Columbia Amateur Radio Association  
Culpeper Amateur Radio Association  
D-MARC - Digital Mid-Atlantic Radio Council  
Department of State Amateur Radio Club  
Dulles Amateur Radio Group  
Explorer Post #80- Amateur Radio  
Fauquier Amateur Radio Association  
Frederick Amateur Radio Club  
Frederick Amateur Repeater Group  
Goddard Amateur Radio Club  
Green Mountain Repeater Association  
Hanover Area Hamming Association  
Historical Electronics Museum Amateur Radio Club  
IBM Amateur Radio Club  
Johns Hopkins University APL ARC  
Kent Island Amateur Radio Club  
Laurel Amateur Radio Club  
Leisure World Amateur Radio Club  
Loudoun Amateur Radio Group  
MD/DC MARS (Navy Marine) Association  
MADRAS  
Maryland Emergency Phone Net  
Maryland FM Association  
Maryland Mobileers Amateur Radio Club  
Mercury Amateur Radio Assn., NE Area  
Metropolitan Communications Network  
Metrovision Amateur TV Club  
Mid-Atlantic DX & Repeater Assn.  
Montgomery Amateur Radio Club  
Montgomery Auxiliary Communications Service  
Moose Amateur Radio Club  
Mount Vernon Amateur Radio Club  
National Capitol ARES Council  
National Capitol DX Association  
Naval Research Laboratory Radio Club  
NOAA Amateur Radio Club  
North Point FM Association  
Northern Virginia FM Association  
Northern Virginia Radio Club  
Ole Virginia Hams Amateur Radio Club  
Opequon Radio Society  
Pentagon Amateur Radio Club  
Potomac Area VHF Society  
Potomac Valley Radio Club  
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Prince George's County ARES/RACES  
Quarter Century Wireless Association, Inc.  
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    Del-Mar-VA Chapter #150  
    Shenandoah Valley Chapter #137  
    Vic Clark Chapter #91  
    Washington Chapter #23  
Rock Creek Amateur Radio Association  
St. Mary's County Amateur Radio Association  
Shenandoah Valley Amateur Radio Club  
Southern Maryland Amateur Radio Club  
Southern Patuxent Amateur Radio Club  
Stafford Amateur Radio Assn.  
Sterling Park Amateur Radio Club  
Summit Amateur Radio Association  
Tri-County Amateur Radio Club  
T-MARC, Middle Atlantic Repeater Council  
Vienna Wireless Society  
Voice of America Amateur Radio Club  
Waldorf Repeater Support Group  
Washington Adventist Amateur Radio Assn.  
Washington Area Young Ladies ARC  
Woodbridge Wireless, Inc.

## NEXT FOUNDATION MEETING

The Foundation for Amateur Radio, Inc. meets at 8: p.m. on the second Wednesday of each month. **Visitors are always welcome!** The next meeting will be held March 12th at the Lee Center, Alexandria, Virginia. Take Capitol Beltway to Exit 1 (US 1 North). North to the second traffic light, left on Gibbon Street to Fayette. Left on Fayette to dead end at Lee Center Parking Lot. The meeting is conducted in the conference room near the main office of the center.

**Talk-in on  
146.55**



# Rules and Regs



By Jack Kelleher  
W4ZC

or licenses needed to get onto the Internet and working DX is no harder than clicking on an icon marked chat. Needless to say that none of this bodes well for the future of the Amateur Radio Service, and especially for population growth on the high frequency bands.

But there is one bright spot in all of this. The ARRL reports that there were 306 more new licensees age 21 and younger in November of last year than during October. Kids may love the World Wide Web, but some youngsters also consider ham radio a viable communications interest as well. (From Amateur Radio Newsline {ARN} No. 1015, 24 Jan)

## FEWER TESTS - FEWER UPGRADES

The number of people taking ham tests is dropping. The number of amateurs upgrading is almost at a standstill. So say the figures on 1996 year to date ham radio testing published in the January 1st edition of the W5YI Report.

Last week we reported that the number of higher grade license holders was on the decline. That only the no-code Technician class was showing any growth.

According to publisher Fred Maia who also operates the W5YI VEC, people are simply not taking new or upgrade examinations like they used to. Maia says that until 1992 the number of persons being administered Amateur Radio license examinations was steadily on the rise. But in 1995 the number of testing sessions and the number of people seeking tests decreased dramatically. So did the number of examination elements being administered. And 1996 was the worst year yet with 17,000 fewer examines being administered 30,000 fewer examination elements.

Maia says that there is all sorts of speculation as to why ham radio has slipped into a low growth cycle. One of the most prevalent theories is that potential new hams are being drawn away by what he calls the wired world of the Internet and World Wide Web. As Fred points out, there is no exam

## LITTLE LEOs NARROW 2-METER FOCUS TO 146-148 MHZ

In their effort to secure spectrum space that includes the 2-meter and 70-cm ham bands, the Little LEOs have narrowed their focus on 2 meters to the 146 to 148-MHz segment. The industry also appears to be attempting to reposition itself as a potential emergency communication adjunct to ham radio.

The little LEOs will use low-Earth-orbiting satellites to provide position-location and two-way data-messaging services to potential customers around the world. Customers would use small, inexpensive transceivers to communicate with satellites. According to the FCC, potential uses of this service include emergency location in remote areas, environmental data collection, vehicle tracking, and time-sensitive business and personal data communication.

For Region 1, a draft little LEO frequency allocation table has proposed adding a primary mobile-satellite allocation of 146 to 148 MHz to the existing allocations for fixed and mobile (except aeronautical mobile [R] services). The table was contained in a working paper—Document IWG-2A/86 Rev. 3, entitled “New Allocations for

*Continued next page*



the Mobile-Satellite Services Operating Below 1 GHz"—submitted by representatives of the Little LEOs industry to Informal Working Group-2A (IWG-2A) January 7.

The 146 to 148-MHz segment is not a ham band in Region 1, but in Regions 2 and 3, a footnote would be added to state: "Additional allocation: the bands 146-148 and 430-440 MHz are also allocated to the mobile-satellite service, limited to non-geostationary satellite systems, for use only during emergency communication situations as a complement to the amateur service in accordance with Resolution No. 640."

The little LEO proposal also calls for a new primary allocation for the mobile-satellite (space-to-Earth) service for 430-440 MHz in Regions 2 and 3 (ham radio is primary in Region 1), and offers this rationale. "The allocation for the mobile-satellite service within the bands allocated to the amateur service is intended to be a complement to that latter service in situations involving emergency communications as provided for the [sic] Resolution No. 640."

As currently drawn, Resolution 640 covers only the 144 to 146-MHz segment of 2 meters and does not apply at all to 70 cm. In the 440 to 450-MHz band, where the Amateur Service is not listed in the international table of frequency allocations except by footnote (ham radio is secondary in Australia, the US, Jamaica, the Philippines, and Canada), the little LEOs proposed a new worldwide primary mobile-satellite (space-to-Earth) allocation.

Calling their service "inherently global" the little LEO group said the industry needs "frequency allocations that can be used anywhere in the world," for nongeostationary, nonvoice mobile satellite service through the year 2002. "ITU-R studies indicate sharing is possible," the industry said. "If the demand for Little LEO spectrum cannot be satisfied by allocations that could be used on a worldwide basis, one solution is to assign different frequencies for use in the various regions

of the world from within the allocations to the mobile satellite service," the working paper's preamble said. Little LEO firms CTA, E-Sat, Final Analysis, GE Starsys, and LEO One submitted the third revision of the lengthy paper—which drew criticism from the ARRL as well as from military and land-mobile interests and the National Telecommunications and Information Administration—at the January 7 session.

The ARRL continued its objection to the inclusion of amateur bands and to the misapplication of Resolution 640. For now, Document IWG-2A/86 Rev. 3 is tabled, but it's expected to come up again at future meetings. IWG-2A meets on January 21 and February 4.

Overall, the little LEOs proposed the following bands for additional allocation to nongeostationary data-only mobile satellite service systems: 138-144, 146-148, 149.9-150.05, 150.05-156.7625, 380-387, 387-390, 390-399.9, 399.9-400.05, 400.15-401, 430-440, 440-450, 470-608 and 614-806 MHz. The paper notes there are proposals concerning 401-406 and 450-470 MHz and for feeder links at 1390-1400 and 1427-1432 MHz in other papers, and that "additional allocation proposals are under construction for the 174-230 MHz band." For additional information on the little LEOs situation, read the editorial "It Seems to Us ..." by ARRL Executive Vice President David Sumner, K1ZZ, in February 1997 QST.

## **RF SAFETY QUESTIONS TO HIT IN JULY**

(See ARN 1015; also W5YI Report 15 January)

The nation's VEC's have decided to begin testing hams on the new RF exposure questions next July. This, even though the FCC had granted a years moratorium on the implementation of its new rules regulating human exposure to radio frequency energy.

When it adopted the new RF exposure rules, the FCC also put forth a requirement that additional RF safety questions be added to the Novice,

*Continued next page*



Technician, Technician Plus and General class Amateur Service exams. This meant revising the Question Pool for these exam elements.

On December 1 the VECs Question Pool Committee released revised questions for Elements 2 and 3A which are to be included in examinations administered after July 1, 1997.

The new RF safety questions are intended to quiz an applicants knowledge of the hazards of exposure to strong electromagnetic fields as well as what precautions should be taken to keep himself and the general public away from harm.

### **ANOTHER VANITY DELAY**

ARN #1015, 24 January also reports that The FCC says that it could be March before another call is issued under Gate 2 of the vanity call sign program. No vanity calls dated since the end of last November have been processed because of what an FCC spokeswoman called unspecified computer related problems.

According to the Gettysburg License Processing Facility, vanity applications have not been processed since last December 19th. While computer experts work to resolve the latest problems,

### **NON FM TO FILE FOR UHF/VHF PROTECTION**

Weak signal and other non-FM users of the VHF and UHF spectrum are saying it will be full speed ahead in preparing a rule making request to the FCC to protect their turf from encroachment by users of the "fun mode." This, in light of the formal signing of the agreement between the National Frequency Coordinators' Council and the American Radio Relay league. An agreement that creates the National Frequency Coordination office as the potential single point of contact between the FCC and the FM coordination community.

The move by weak signal, CW, SSB, EME, Amateur Television, satellite enthusiasts and even

AM users to legally protect their subbands from encroachment by users of FM began on the Internet Usenet about three months ago. These hams say that are very concerned about the memorandum signed between the ARRL and the NFCC because previous gentleman agreements dealing with protected spectrum may not longer be honored by the FM community. The loose knit group will ask the FCC to legally designate certain portions of all amateur bands from 50 MHz to 13 centimeters as being off limits to any FM signal, be it simplex or repeated in any way.

6 meters and 2 meters already have protected segments for Morse only operation. The coalition will request additional band segment protection based on current ARRL bandplans. No protection is being asked for spectrum above 13 centimeters because there is not yet any mode standardization nor many users of these super high frequency bands. (ARN 1015/24 Jan; W5YI/15 Jan, Page 8)

### **FCC ESTABLISHES 5.7-GHZ U-NII SERVICE**

The FCC has amended Part 15 of its rules to make available 300 MHz of spectrum in the 5-GHz range—including part of secondary Amateur Radio allocations in that region—for use by Unlicensed National Information Infrastructure (U-NII) devices (formerly referred to as NII/SUPERNet devices). The FCC made available 5.15 to 5.35 GHz and 5.725 to 5.825 GHz. Part 15 requires that unlicensed operations not interfere with other services. The U-NII devices will provide short-range, high-speed wireless digital communications on an unlicensed basis.

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*Continued next page*



services. The U-NII devices will provide short-range, high-speed wireless digital communications on an unlicensed basis. The 5.650 to 5.925-GHz band is allocated on a secondary basis to the amateur service; additionally, the 5.65 to 5.67-GHz and 5.83 to 5.85-GHz subbands are allocated to the amateur-satellite service on a secondary basis. The original FCC U-NII proposal included 5.725 to 5.875 GHz, but the plan adopted this month excludes 50 MHz of this, including the Amateur Radio-satellite downlink at 5.83 to 5.85 GHz.

The FCC said it was "adopting the minimum technical rules necessary to prevent interference to other services and to ensure that the spectrum is used efficiently" in order to permit "significant flexibility in the design and operation of these devices." Significantly, the FCC abandoned its original proposal that would have presumed that U-NII devices were not causing harmful interference—even if interference was, in fact, caused—as long as the devices were operated within the technical parameters of the new regulations.

Although it initially proposed a listen-before-talk protocol, the FCC deleted this requirement in its final Report and Order, concluding that requiring such "spectrum etiquette" could delay deployment of U-NII devices and hinder innovation. Instead, the Commission concluded that simple technical rules "should be sufficient to ensure spectrum sharing between incumbent operations and new U-NII devices." The Commission also declined to adopt a channelization plan or a minimum modulation efficiency requirement.

Incumbent users of the 5.725 to 5.825-GHz band either opposed allowing U-NII operation because of interference concerns or urged that sharing studies be completed before that band was made available to U-NII devices.

In its comments on the plan, the ARRL argued against setting up an unlicensed service. The League asserted that longer-range community networks are not consistent with the typical low-power operations authorized by Part 15. The ARRL

said that the Communications Act requires that such higher-powered systems with a significant interference potential be operated on a licensed basis, and that the FCC was unlikely to enforce the requirement that unlicensed-device users cease operation if they cause harmful interference to allocated services.

The League argued that permitting the power of U-NII operations to exceed 100 mW EIRP or permitting the use of high-gain antennas by non-spread-spectrum U-NII devices would represent a significant departure from the underlying precepts of Part 15. Although the ARRL opposed the operation of U-NII devices in the 5.725 to 5.825-GHz band, it stated that if a 100-mW EIRP limit and a power spectral density (PSD) limitation of 0.03 mW in any 3-kHz bandwidth were adopted, then U-NII devices should be able to share this band with incumbent operations.

The FCC concluded that an increase in the power limits proposed in its rulemaking notice was supported by "new material in the record in this proceeding" but said that unrestricted antenna gain should be permitted because of interference concerns. The Commission decided to increase the maximum peak power limit to 50 mW peak transmitter output power with up to 6 dBi antenna gain (which equates to 200 mW EIRP) in the 5.15 to 5.25-GHz band; 250 mW peak transmitter output power with up to 6 dBi antenna gain (which equates to 1 W EIRP) in the 5.25 to 5.35-GHz band; and 1 W peak transmitter output power with up to 6 dBi antenna gain (which equates to 4 W EIRP) permitted in the 5.725 to 5.825-GHz band. Further, the FCC adopted a PSD requirement for U-NII devices that would require that the maximum power be spread across a bandwidth of at least 20 MHz.

The FCC said it believes that the new rules "will foster the development of a broad range of new devices and service offerings that will stimulate economic development and the growth of new industries." (Tnx ARRL Letter Jan. 17)





# American Radio Relay League Report

By John Swafford,  
W4HU

afford members an opportunity for discussion and comment.

Noting the increasing number of participants in the spectrum management process, the Board created the ARRL Spectrum Forum, an e-mail roundtable for national amateur organizations, as well as regional entities and interests. The ARRL Spectrum Committee was dissolved, with the thanks of the Board.

## In Other business:

*The purpose of the ARRL Letter is to provide the essential news of interest to active, organizationally minded radio amateurs faster than it can be disseminated by our official journal, QST. We strive to be fast, accurate and readable in our reporting. Material from The ARRL Letter may be reproduced in whole or in part, in any form, including photo reproduction and electronic data banks, provided that credit is given to The ARRL Letter and The American Radio Relay League.*

## ARRL BOARD MEETS IN ALBUQUERQUE

The ARRL Board of Directors met in annual session, January 17 and 18, 1997, at Albuquerque, New Mexico. Here is a summary of the meeting highlights:

Responding to survey results that show that the majority of members favor retention of Morse code for HF operating privileges as an international treaty obligation, the Board decided that the ARRL will not support changing the existing treaty requirement—an issue on the WRC-99 agenda. The Board also accepted other committee recommendations regarding the international rules that govern the amateur and amateur-satellite services.

A committee proposal for modifications to the FCC amateur licensing structure is to be published shortly in QST. Members will be invited to comment to their directors before May 31, 1997. The Board will not take action on the committee recommendations earlier than its July meeting, to

\* Dr Robert C. Smithwick, W6JZU, and Ken Kirk-Bayley, GJ0KKB, co-founders of MediShare International, won the ARRL International Humanitarian Award for 1996. The ARRL Humanitarian Award is given to Amateur Radio operators who have used their skills to benefit others and have worked to promote international goodwill. MediShare International provides medical supplies, instruments, equipment, and trained health professional volunteers to work in clinics and hospitals in Third-World countries. Smithwick's outstanding achievement began in 1989 when he overheard a ham in Rwanda tell another in England that his small local hospital needed a part to fix the only sterilizer in its operating room. Smithwick, a retired dentist, broke in on the QSO and said he could help by using his connections with another service-oriented organization, the Medical Amateur Radio Council (MARCO), founded in 1965. Thanks to the quick efforts of Smithwick, the English radio amateur, and another from the states who volunteered to make the sterilizer part, the Rwandan hospital got what it needed and MediShare International was born. It's now a MARCO program. Over the years, MediShare International has provided hundreds of thousands of dollars to help people all over the world get modern, safe medical treatment. Among other projects, organization volunteers are now working to staff a new pediatric wing at a Kenya hospital. Soon, MediShare International hopes to begin bringing people to the U.S. to teach them medical equipment repair skills they can use in their

*Continued next page*



own countries. (Thanks to Jennifer Gagne, N1TDY, for supplying additional information—Ed.)

\* James Jacobs, K1GHT, received the ARRL Certificate of Merit in recognition of his lifetime of humanitarian service and good will through Amateur Radio. Michael Pilotti, N3IRZ, also won an ARRL Certificate of Merit in recognition of his arranging for the travel of Ukraine radio amateur Nick Bortnick, UX0ZZ, to the US for special medical assistance.

\* The League's Executive Committee was tasked with studying the adequacy of FCC rules governing the qualifications of volunteer examiners, particularly with respect to those VEs who have obtained license upgrades by means of Morse code-element credit-waiver provisions. The Executive Committee was also tasked with investigating the extent of abuses of the Morse code exam-waiver provisions for applicants with severe handicaps and recommending any regulatory changes deemed necessary.

\*The Membership Services Committee was directed to study ways to better serve the digital community.

\*Atlantic Division Director Kay Craigie, WT3P; Northwestern Division Director Mary Lou Brown, NM7N; Southeastern Division Director Frank Butler, W4RH; and Southwestern Division Director Fried Heyn, WA6WZO, were elected to the Executive Committee.

\*Roger Franke, K9AYK, Tom Comstock, N5TC, and Tom Frenaye, K1KI, were re-elected to the ARRL Foundation Board of Directors.

\*ARRL will establish an Alternative Dispute Resolution service for the use of individual amateurs, amateur organizations, citizens, organizations and others having disputes over Amateur Radio-related subjects.

Full details on the January Board of Directors

meeting will appear in March QST.

## **FCC Finds Missing Call Signs: Vanity Processing Could Resume Soon**

Following up on "a few inquiries" into why certain call signs were not assigned when they were available, FCC personnel in Gettysburg report they found some 3355 call signs (mostly 2x2 and 2x3 format) that should have been made available for the vanity program but were not, for some reason. An FCC spokesman in Gettysburg reports a search of all vanity applications (including those that required special handling) comparing requested call sign(s) against the 3355 turned up to be resolved. The other call sign now have been made available for future vanity grants.

As reported in a previous ARRL Letter, callers to the FCC's Gettysburg office were being told that processing of vanity call sign applications would not resume until early March because of "unspecified computer-related problems." Gettysburg now seems to be pulling back from that date, and a spokesperson said this week that the FCC hoped to resume vanity processing by February 1. Before processing the backlog of vanity call sign applications, personnel in Gettysburg first plan to deal with those applications that required special handling—the so-called "WIPS" (work in process) stack—which is backlogged from early November. A spokesman said Wednesday that the FCC will resume work on the WIPS stack "in about a week. Also, contrary to what several callers were told, the FCC did not issue a public notice about the vanity call sign program this week.

## **Ol' Sol Still in the Doldrums**

Solar observer Tad Cook, KT7H, in Seattle, Washington, reports: We are still at the solar minimum, with very little activity to report. Since there are no really active regions that we know of on the solar surface, there is no activity to forecast as the solar surface rotates relative to the Earth.

*Continued on next page*



This week's average solar flux was exactly the same as the week previous, and the sunspot numbers were barely higher. Unlike the previous week, there were no periods of geomagnetic activity, and the A index stayed in the single digits. The next few weeks are expected to stay the same, with the solar flux around the low to mid 70s, and the A index around 5. The A index may jump up to around 10 on February 3, and again around February 6-9.

### **In Brief:**

\* **Correction:** In the report FCC Establishes 5.7-GHZ U-NII Service in The ARRL Letter, a word was omitted in one sentence. The sentence should have said: The FCC concluded that an increase in the power limits proposed its rulemaking notice was supported by "new material in the record in this proceeding" but said that unrestricted antenna gain should not [emphasis added] be permitted because of interference concerns.

\* **Job opening at HQ:** The ARRL has an opening for an Assistant Contest Manager at its headquarters in Newington, Connecticut. Candidates must be thoroughly interested in an knowledgeable of the League's varied contest programs and familiar with DXCC countries, ARRL sections and divisions, and current contesting issues. An Amateur Radio license, writing skills, PC familiarity (including DOS, Windows, database management and e-mail), and a high degree of attention to detail and the ability to work well under deadline pressure are required. Send resume and salary expectations to R. Boucher, ARRL, 225 Main St, Newington, Ct 06111; fax 860-594-0298; e-mail [rboucher@arrl.org](mailto:rboucher@arrl.org).

\* **New VK0IR frequencies:** The Heard Island (VK0IR) DXpedition has announced new low-band frequencies: 160 meters, 1822 (preferred) or 1826.5 kHz; 80 meters, CW, 3504.5 or 3509.5 kHz for Europe; 80 meters, SSB 3798 kHz; 40 meters, CW, 7007 or 7022 kHz; 40 meter SSB, 7047.5, 7052.5, 7057.5 or 7065 kHz. As of January 22,

the VK0IR team had racked up some 55,000 QSOs.

\* **Changing trustee's call sign:** When a club station trustee gets a new call sign, the FCC does not automatically change the trustee's call sign shown in its club records. Although this is not required, a trustee can send the FCC in Gettysburg a letter requesting that it change the trustee call sign on the club license. The letter should include the name of the club, the club call sign, the trustee's former call sign and the trustee's current (ie, new) call sign.—FCC

\* **Cover plaque winners:** Tom Spann, WD0HBR, won the QST Cover Plaque Award for the November 1996 issue of QST for his article, "The FCC Grand Island Monitoring Station." Bruce L. Kelley, W2ICE, won the QST Cover Plaque Award for the December 1996 issue of QST for his article, "Hams Span the Atlantic on Shortwave!" Congratulations!

\* **The DX Magazine has new publisher:** Paul and Nancy Smith (ND4X and KB4RGW, respectively) will turn over The DX Magazine to another Smith—Carl Smith, N4AA—starting with the March/April 1997 issue. Paul and Nancy Smith had acquired the publication last year from Chod Harris, VP2ML. Carl Smith is a former ARRL staff member. He already published QRZ DX. Paul and Nancy Smith publish The Golist QSL Manager List, The DX Bulletin, and The DX Reporter.

\* **Keeney no longer FCC candidate:** The Washington Post this week reported that Regina Keeney has asked not to be renominated for a Republican seat on the Federal Communications Commission. Keeney said she would, instead, remain as chief of the FCC Common Carrier Bureau. President Clinton nominated Keeney last year, but Congress did not act on the nomination. Keeney cited personal reasons, for her decision, but her Senate confirmation was not assured. Some Republican senators reportedly were upset over not being consulted when she was nominated last year.





## Elmer's Corner

By Paul E. Wilkins,  
AB4CY

### FEEDBACK

Feedback is a word that has crept into a number of disciplines like psychology, politics, education, etc. It had its origin in electronics in the 1920's where it was coined to describe the then pesky condition of some of the output of an amplifier finding its way back into the input where it is reamplified. The feedback generally occurred through stray capacities between components.

Feedback comes in two flavors, positive and negative. Positive feedback causes an increase in the amplifier gain. If the feedback level is great enough the circuit will break into oscillation. The super-regenerative receiver is an example of the application of positive feedback. The feedback level is increased to just below oscillation where it will provide a significant amount of gain in a single stage. However, it is difficult to tame. The percentage of output signal feedback is known as the feedback factor.

Positive feedback is most often "neutralized" by generating a negative feedback path to loop back an out of phase voltage to cancel the positive component. This is the function of those neutralizing capacitors you find on high power RF amps with tube finals.

The properties of negative feedback took a little longer to unravel. It didn't seem logical to apply a technique to reduce the gain of an amplifier you just built to provide gain. When a ten to fifteen percent feedback was applied it was discovered that

the amplifier stability was markedly improved as was the linearity. The circuit was more tolerant of circuit component variation and the frequency response was flattened to provide a wider bandwidth over which uniform amplification was obtained.

The most significant improvement was in the reduction of signal harmonic distortion introduced by the first amplification by the amplifier. In other words the process was self correcting.

Last but not least the negative feedback increased the input impedance and lowered the output impedance of the amplifier. This latter effect became quite important in designing tube stages to drive low impedance loads like co-ax cables in radar systems. Some amplifiers were designed to have a negative gain just to obtain some of the other benefits of applying the technique.

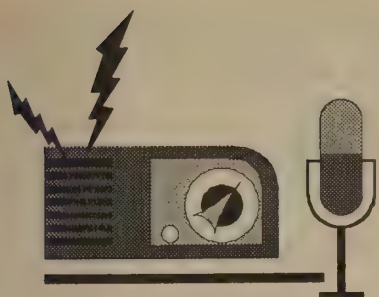
Negative feedback reached its heyday in applications of hi-fi audio amplifiers in the 1960's. Feedback was applied around stages within a multistage amp and then also around the whole amp. These techniques produce wideband, flat frequency response with harmonic distortion down to a maximum of thousandths of a percent.

All current day amps employ various amounts of negative feedback. Digital techniques perform a similar result by regenerating a clean pulse for each incoming corrupted pulse in the data stream.

An antenna feedline and a mike cable can also create a feedback circuit, usually with undesirable results. This generally can't be neutralized except by eliminating the stray capacity coupling between the two by separation or shielding.

Another double use of an amplifier was known as "reflex". In this technique an IF amplifier in a receiver was used to amplify the audio signal after it was detected. This was done to reduce the stage count in a receiver to reduce the cost. It was popular in Europe for a while but never caught on here in the States.





## DX DX DX

By John Kanode,  
N4MM

### HEARD ISLAND DXPEDITION OVER-IT WAS A BIG SUCCESS

The DXpedition of the year is over. Final number appears that they made over 80,000 QSO's. They had five full 1 KW stations the air and were active on 160 through 10 Meters and operated CW, SSB and RTTY and one of the satellites. The only thing that was against them was propagation, or the lack thereof, on the higher HF bands.

Activity on 15 meters was there but very limited to the US and it appears no one in the US worked them on 12 or 10 meters. In fact, they were reporting only 250 QSO's on 10 for the whole world. I suspect those were with stations in South Africa and Australia. As this is being written, they are closing down the stations and packing everything up for the 50 or so helicopter flights that are required to get all the support equipment and shelters back on the ship that will take them to back to Reunion Island. I am sure Heard Island has moved way down the Most Wanted List. Towards the end of the operation, people were working them with 5 watts and dipoles.

With every major DXpedition, there are a few who try to disrupt things by creating malicious QRM. Very little of this took place except on 75 meters. I do not know what it is about 75 meters that draws all the malcontents of the Amateur Radio World there. Despite all their efforts, many thousands of QSO's were made on 75 meters. The QRM maggots lose again.

I am sure the group made a video record of the DXpedition and it, more than likely will be shown at the DX Forum at Dayton and several other major

ARRL Conventions around the country in 1997. QSL's go to W4FRU. There are rumors that this same group will be doing more DXpeditions to remote spots in the Antarctic area in 1998 and 1999.

I was fortunate to work them on 18, 20, 40 SSB and 20, 40, 30 and 80 CW. Being away for 5 days at the ARRL Board Meeting did reduce the time that I had to try to work them. It will be many years before this remote place will appear on the air again.

### UPCOMING DX CONTESTS

ARRL Intn'l DX Contest Phone	March 1-2
Bermuda Contest	March 15-16
BARTG Contest	March 15-16
CQ WW WPX Contest Phone	March 29-30

### TIDBITS

The DX Magazine, previously published by Paul and Nancy Smith, following many years of publication by Chod Harris, has been purchased by Carl Smith, N4AA, current publisher of QRZ DX. The March/April 1997 issue will be the first by the new publisher. Carl welcomes and encourages submission of DX related articles for consideration.

For more info on this publication, send a #10 SASE to DX Magazine, PO Box 16522, Asheville, NC 28816-0522. Telephone and FAX number is 704-683-0709. EMail is N4AAaAOL.COM

T31/T30DP and YA9XL QSL's are not acceptable for DXCC due to lack of documentation.

The YASME Foundation is still around. Mac, W6BSY handles QSL for past YASME operations, most of which were operations by the Colvins. If you need a QSL from one or more of the past Colvin operations, you can use the YASME address in all callbooks or direct to W6BSY. Please send SASEs. Since Lloyd Colvin passed away several

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## SPECIAL RF SAFETY PRESENTATION

Dr. Robert Cleveland, an RF Safety expert from the FCC will be the guest speaker at the Mount Vernon Amateur Radio Club (MVARC) meeting to be held on Thursday, March 13, 1997.

Dr. Cleveland's presentation will begin at 8:30 PM immediately following the MVARC business meeting, which begins at 7:30. All interested hams are invited to attend. Location for this meeting will be the First Christian Church at 2723 King St. in the City of Alexandria. The church is located approximately 1 mile West of the King St. Metro station and approximately 100 yards West of the intersection of Janneys Lane and King St. Please note that, as in all guest presentations, there is some possibility that the speaker may be unable to attend due to unforeseen business or personal emergencies. For further information, contact John Forrest WZ4A at (703)971-3905.

### *DX DX DX, continued from previous page*

years ago, YASME has taken a low profile in the DX World. Editors Note: While going through the flea market at the Greensboro Hamfest last Fall, I found a copy of the YASME Newsletter in a pile of old QST's that were being sold. It was Volume 1, Issue 1, dated September 1959. The person selling it wanted 25 cents for it. Needless to say, I bought it!

The equipment that Jim Smith, VK9NS sent to the Andaman Islands has been received by Mani, VU2JPS. Jim is planning a trip to the Andaman Islands and hopes to activate this rare spot. It is not difficult to go to this place, It is a tourist location with scheduled airline flights, the problem is with the Indian Government. For some reason, they will not allow Amateur Radio from there. Just getting the equipment there was a long struggle with various departments of the Indian Government. It appears like someone in high places in India does not like Amateur Radio.

The recent DXpedition to Yemen, 701A was a success. They made 13,140 QSO's and operated 80 through 10 meters. They only made 240 QSO's on 10 meters. This was only a 2 man DXpedition but they gave out a new one to many of the new DXers. I hope they have good documentation, since Yemen has not been a supporter of Amateur Radio, due to internal wars. They have been invited back in 1997 and hopefully this will open doors for continued Amateur Radio activity in that country.

The Southwest Ohio DX Association has announced the 12th Annual DX Dinner which will be held on Friday, May 16, 1997 at the Crowne Plaza Hotel in Dayton, Ohio. There will be a cash bar at 6:30 PM and dinner at 7:17 PM. Tickets are \$29.00 and must be purchased in advance. Groups wishing to sit together must order as a group. Please make your check or money order out to SWODXA and send a SASE for ticket return. Tickets can be ordered from Tom Inglin, NR8Z, 4061 Eaton Road, Hamilton, Ohio 45013. For more info, contact Steve Bolia, N8BJQ at 513-429-9954 or FAX at 513-429-0218 or E-Mail to n8bjq@erinet.com.





# Traffic Fun

By Geri Sweeny,  
N4GHI

**CORRECTION:** The MDD, Maryland-Delaware Traffic Net meets on 3643. I'm very pleased to report that receiving this bit of news has instantly converted the MDD from a SSB to a CW net. You will also note that it meets twice a night. I thank the person who called me with this correction. He was amazed that no one had brought it to my attention before this.

<b>BTN</b> (Balt.TfcNet)	6:30 pm	146.67
<b>NVTN</b> (NoVaTfcNet)	7:30 pm	147.30
<b>DCTN</b> (DCTfcNet)	8:00 pm	147.36
<b>VNT</b> (VaTfcNet)	1:00 pm	3907
<b>MEPN</b> (MdEmerPhoneNet)	6:00 pm	3920
<b>VSBN</b> (VaSidebandNet)	6:00 pm	3947
<b>VNE</b> (VaNet - Early)	7:00 pm	3680 (CW)
<b>MDD</b> (MdDe)	7:00 pm	3643
<b>MSN</b> (Md Slow Net)	7:30 pm	3717 (CW)
<b>VNL</b> (VaNet - Late)	10:00 pm	3680 (CW)
<b>MDD</b> (MdDe)	10:00 pm	3643
<b>VLN</b> (Va Late Net)	10:15 pm	3947

Note we have three VHF (2-meter) nets. These are Local Nets that have liaison stations to take your traffic to a Section Level Net.

## HOW DOES THE NATIONAL TRAFFIC SYSTEM WORK?

There are two, daily, HF traffic net cycles throughout the USA and Canada. Canada is part of the National Traffic System (NTS). Glancing at a map, we see three Areas: Pacific, Central, and Eastern. Regions 1, 2, 3, 4, 8, Eastern Canada, and Atlantic (Int'l Traffic) make up the Eastern Area.

Each Section (generally a state), has some number of HF nets. The Section has a Section

Manager (voted to office by ARRL members). The SM then selects a Section Traffic Manager, a Section Emergency Coordinator, and many other positions. The STM is responsible for assigning net managers, collecting reports, and trying to insure traffic runs smoothly. You do not have to be an ARRL member to play.

Since folks in Virginia are part of the 4RN (Fourth Region Net), and folks in Maryland and DC are part of the 3RN (Third Region Net), we don't often meet on the air (HF). The 4RN is made up of Virginia, Carolinas, Georgia, Florida, and Puerto Rico. The 3RN is made up of Maryland, DC, Delaware, and Pennsylvania.

The afternoon cycle is mostly SSB. The evening cycle is mostly CW. Section Level (state) Nets meet and, send a liaison station to their Region Net. A liaison station takes out of Region traffic to the Eastern Area Net. A Region receive station returns to the Region Net to disperse traffic for Sections. A Section liaison station returns to each Section Net. In the evening cycle, most of the Section nets meet at 7 and 10 pm. Here stations list traffic by city, if for the Section, and by Region (3RN or 4RN), if leaving the Section. Most Region nets meet at 7:45 and 9:30 pm. Here traffic is listed by State, if in the Region, or for EAN, if out of the Region. The Eastern Area Net meets at 8:30 pm. Here traffic is traded between Regions for the late Region sessions. Then, it's back to the late Section net at 10 pm. In Virginia, we have a SSB Section Net on either side of our CW nets (VSBN at 6pm and VLN at 10:15 pm).

Virginia has 5 HF nets. Our afternoon cycle starts at 1 pm. A liaison station takes any traffic leaving Virginia to the 4RN at 1:45. Here traffic is traded between Regions. A liaison station takes traffic on to the EAN at 2:30 pm. Another liaison station meets the EAN to receive any traffic listed for the 4RN. Back on the 4RN at 3:30 pm, traffic is again traded between 4RN states. A liaison from Virginia takes any traffic for Virginia back to the VSBN (Virginia SideBand Net) at 6 pm. At 7 pm, the whole cycle begins again.





## Revised Band Plans Proposed for 2 Meter and 70 cm Bands

By Gary, W3DTN

The Middle Atlantic FM and Repeater Council (T-MARC) and the Digital MidAtlantic Radio Council (D.M.A.R.C.), along with representatives of the Amateur Television (ATV) community in the greater Baltimore-Washington area, have drafted proposed revisions to the band plans for the 2 M. and 70 CM bands. These changes are intended to provide more channels for digital operations, and to alleviate some of the interference problems ATV'ers are experiencing.

On 2 Meters, the proposal includes re-coordinating the existing repeaters and replexes which now operate in the 144.91-144.99 segment to the 15 kHz splinter channels between 147.39 and 147.60 (note that the recommended simplex channels are on 30 kHz spacing from 147.42 to 147.60). The 144.91-144.99 segment would become available for digital use, as is the custom

in most of the rest of the country. In addition, the revised plan provides for digital operations between 144.30-144.40, experimentation between 144.40-144.44, and space operation from 144.44-144.50. All digital activity above 146 MHz will move to the digital sections below 146 MHz by January 1, 1998, the proposed implementation date for the new band plan.

On 70 CM, 3 digital channels will be added at 446.025-446.075 (these were originally designated for simplex) and additional digital channels will be added from 433.400-433.575 MHz. 433.325-433.375 and 433.600-433.650 will be designated for experimental operations, and a new group of simplex channels will be added between 433.675-433.775 MHz.

Finally, digital operations near 441 MHz in areas within the service areas of any of the coordinated ATV repeaters will, where practical, be encouraged to observe "quiet hours" from 7-11 PM each evening. This includes the greater Baltimore and Washington, D.C., areas. While it is recognized that not all digital stations can observe these quiet hours, the added channels at 446 and 433 MHz offer spectrum where stations, especially higher powered digital stations, may move to and not interfere with ATV operations.

Again, these proposed changes are intended to help both the digital and ATV interests in our area, without seriously impacting other operations. Anyone with ideas regarding these proposed changes are invited to send your comments by the end of March to T-MARC, at Post Office Box 1022, Savage, Md. 20763-1022, ATTN: DAC Bandplan.

### Hazardous Material Disposal - March 2, 1997

There will be a Hazardous Material and Waste Disposal drop-off at the Shady Grove Road Transfer Facility on March 2nd from 10:00 AM to 2:00 PM. All types of hazardous materials, such as: lead acid batteries, gel cells, NiCad batteries, oil containing PCBs, automobile oil, gasoline, kerosene, pesticides, thinners, solvents, paints, explosives, etc. will be collected and disposed. There is no fee for this Montgomery County provided service. Please use the entrance on Shady Grove Road.





## Ethel Smith, K4LMB

### Silent Key

Ethel Smith, K4LMB, of McLean, Virginia—who inspired and helped found the Young Ladies Radio League (YLRL)—died February 5. She was 79. In accordance with her wishes, no services are scheduled.

A ham for more than 60 years, Smith—a Wenatchee, Washington, native—discovered “wireless” as a youngster and became licensed as W7FWB in 1936.

A story in QST for May 1940 outlines how Smith’s letter to QST encouraged other female hams to form their own organization, which became the YLRL in October 1939 (with Ethel Smith as its first president). Her stints with the Army and Navy during World War II led to an offer from the Naval Research Laboratory in Washington, DC, in 1945 (she joined the Naval Reserve in 1950 and remained an active reservist for 10 years). Smith also participated in the formation of the Foundation for Amateur Radio (FAR) in 1957 and served as editor of *AutoCall* for many years.

She met and married the late John “Tex” De Bardeleben, W4TE (ex-W3CN), who was with the FCC. The couple set up housekeeping in Virginia, and she later served as the Virginia SEC (1966-69) and as an ARRL Assistant Director under four different Roanoke Division directors. Just last August, she passed her Extra class examination.

In addition to being a member of ARRL, Ethel Smith was a member of QCWA, served as its executive secretary/general manager in 1974-75, and was elected to the QCWA board of directors. Her other recognitions include: Ham of the Year, Washington, DC, Mobile Radio Club (1965); ARRL Roanoke Division Service Award (1972); Dayton Hamvention Special Achievement Award (1984); QCWA Roll of Honor (1987); Radio Club of America Fellow (1988); and Foundation for Amateur Radio Ham of the Year (1993).

In an article in last fall’s QCWA Journal celebrating Smith’s 60 years in the hobby, she was quoted as saying: “Amateur Radio is still the main focus of my life. It has brought me all the good things that ever happened to me. It gave me a challenging and rewarding career. It gave me a wonderful husband and the greatest collection of friends in the world—all over the world. I owe more to Amateur Radio than I can ever possibly repay.” The quarterly featured a front-cover picture of Smith in her W7FWB shack.

ARRL Executive Vice President David Sumner, K1ZZ, expressed sorrow at Smith’s passing, calling her “a leading light in the ham community.” Sumner said that Ethel Smith “never stopped contributing, learning, and growing. I don’t think it ever would have occurred to her that she should.”





# National Capital ARES Council Public Service Calendar - 1997

Sat	Mar 1	NCAC Meeting
Sat	Mar 8	St. Patrick's Day Parade - Alexandria - N3PDK
Sat	Mar 8/9	Roanoke Division Convention
Sun	Mar 16	St. Patrick's Day Parade - DC - N3RPQ
Sat	Mar 22	Alexandria Red Cross Shelter Drill (Hermitage)
	Mar (date to be announced)	Special Olympics - KC4RON
Sat	Apr 5/6	Maryland/DC Section Convention
Sat	Apr 12	Cherry Blossom Parade - DC - N3RPQ
Sat	Apr 12	Multiple Sclerosis Walkathon - K3XO-KC4RON
Sat	Apr 19	Bull Run Run
Sun	Apr 20	George Washington Parkway 15K - WB4EEA
Sun	Apr 27	March of Dimes Walkathon - Leesburg - KD4DGQ
	Apr (date to be announced)	Special Olympics - KC4RON
Fri	May 16/17/18	Dayton Hamvention
Sat	May 17/18	Multiple Sclerosis 150K Bike Tour - N4ZGI
Sun	May 18	Crystal City 10K - Arlington - KD4FRK
Mon	May 26	Great Meadows - WY2V
Fri	May 30/31	Atlantic Division Convention
Sat	May 31	American Lung Assn Clean Air Bike Trek - N4ZGI
	May (date to be announced)	Dulles Airport EMS Drill
Sun	Jun 1	Atlantic Division Convention
	Jun (date to be announced)	American Heart Assn 10K - DC - N3RPQ
Sat	Jun 14/15	Alexandria Waterfront Festival - KA4GFY
	Jun (date to be announced)	Bike Across Virginia - N4ZGI
Sat	Jun 28/29	Field Day
Fri	Jul 4	4th Of July - Mt. Vernon - WB4EEA
Sat	Aug 23	National Capital ARES Council Set
	Sep (date to be announced)	MADDash Bike Trek - N4ZGI
	Sep (date to be announced)	Claude Moore Farm Park - KC4RON
Sat	Sep 20	Virginia Section Convention
Sun	Sep 21	Virginia Section Convention
	Sep (date to be announced)	Multiple Sclerosis Half Marathon - DC - N3RPQ
Sat	Oct 11/12	ARRL SET
Sun	Oct 12	Clifton Days - KC4RON
Sat	Oct 18	Loudoun Hospital Move
Sun	Oct 26	Marine Corps Marathon - N4ZGI
	Nov (date to be announced)	Toys for Tots - KC4RON
Wed	Dec 31	Alexandria First Night - N3PDK



*The Antietam Radio Association, W3CWC is proud to sponsor the fifth Annual*

# **Great Hagerstown Hamfest & Computer Show**

**Sunday, May 4, 1997**

**Hagerstown Junior College**

**Athletic, Recreation, & Community Center**

**Hagerstown, MD**

**ARRL Approved**

**Admission: Adults - \$ 5 Children under 12 - FREE**

**Main Indoor Area - Huge 44,000 Sq. Ft. Arena with handicap accessibility.**

**For Vendors, paid in advance tables \$ 15 each. A discount is available for 11 or more tables. Free electric hookups are available on a limited basis. For advance reservations or more information contact the ARA at (301) 791-3010 (phone/fax) or mail reservations to ARA, P.O. Box 52, Hagerstown, MD 21741.**

**Lobby Area - ARA Hospitality Table, FAR Table, ARRL Table, and Prize Area. The Courtside Cafe will be open serving both breakfast and lunch with seating available.**

**Upstairs - VE Exams will be held at 9 a.m. at no charge by the Mountain VEC. Walk-Ins will be accepted. For more information on the testing session, contact:**

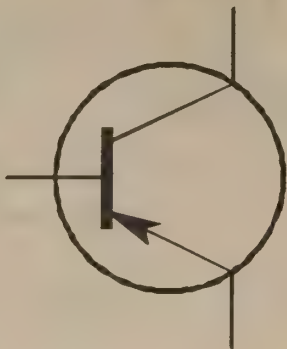
**Leo Patterson, KQ8E (304) 289-3576**

**Gay Rembold, W3DFW (301) 724-0674**

**Outside - Tailgating spaces will be available at \$ 5 per space. All tailgaters must also purchase a general admission ticket.**

**Prizes - Awarded on an hourly basis beginning at 9 a.m. and ending with the Grand Prize drawings at 2 p.m. Over \$ 2,000 worth of prizes will be given away.**





# Amateur Radio Training

John Forrest WZ4A  
6111 Burnett St., Alexandria, VA 22310  
(703)971-3905

Please send announcements for training classes and club training contacts to WZ4A at the above address. Deadline is the 25th of the 2nd month prior to the *Auto Call* publication date (e.g., 25 December for the February issue).

## Club Training Contacts

Alexandria RC	Rich Adamy KA4GFY	(703) 644-3920
Anne Arundel RC	Tony Young WA3YLO	(301) 262-1917
Arlington ARC	Mike Callaham NW3V	(703) 241-5618
Antietam Radio Assn.	Robert Long KD3JK	(301) 824-5132
BRATS (Baltimore)	Joe Chidester W3SHZ	(410) 602-0353
Baltimore ARC	Essex Community College	(410) 780-6854
Fauquier ARC	Neil Spokes AB4YK	(540) 364-3861
Frederick ARC	Hal Silverman W3HWC	(301) 831-7946
Herndon Rep't Gp	Michael Weber WB8RDN	(703) 450-2304
Laurel ARC	Pud Reaver W3YD	(301) 498-6293
Mid-Atlantic DX Assn.	Michael Vaia, WB8VBW	(301) 738-3861
Madras	Larry Ziecheck	(301) 984-6113
MD Mobileers ARC	Bruce Colburn AA3KR	(410) 437-1891
Montgomery ARC	Rocky Jones KC4UXO	(301) 216-5210
Mt. Vernon ARC	John Forrest WZ4A	(703) 971-3905
NASA/Goddard ARC	Vikki Gigante KA3PVS	(301) 249-2609
Ole VA Hams ARC	Charles Dale WA4YGI	(703) 361-3091
Pentagon ARC	David Boyd K9MX	(540) 659-6241
St. Marys Co. ARC	Peter Butt WA3UMY	(301) 862-2214
Shenandoah Val ARC	Guy Black W4PSJ	(540) 722-4952
Southern MD ARC	Vic Curtis WA3YUV	(301) 888-1388
Southern Pax ARC	Dwayne Kincaid WD8OYG	(410) 586-2177
Stafford Adult Ed	Jerry Mullinix AC4HK	(540) 659-3905
Sterling Park ARC	Forrest Snyder N4UTY	(703) 430-4149
Tri-County ARC	John Creel WB3GXW	(301) 572-5124
Vienna Wireless	Paul Wilkins AB4CY	(703) 560-2779
Woodbridge Wireless	Jim Duffey WD4AIR	(703) 491-3170





## Volunteer Examiner Cooperative

JOHN FORREST WZ4A  
6111 Burnett St.  
Alexandria, VA, 22310  
(703) 971-3905

\* Effective July 1, 1997, the Novice and Technician written exam question pools (Elements 2 and 3a) will change. Five questions on RF safety will be added to each exam. All books and study materials not based on these new question pools will be obsolete after that date. Be sure to use study materials appropriate for the current question pool.

\* Effective January 1, 1997, the maximum FCC authorized exam fee is \$6.26.

\* Copies of the complete (as of date) 1997 VEC Exam schedule from the *Auto Call* database are available. To obtain a copy, please send a large, self-addressed envelope with sufficient postage to cover 10 letter-size pages along with \$2.00 to cover copying costs to WZ4A at the above address.

## 1997 Schedule of Examinations

<b>March 1 (Saturday)</b>	<b>Sterling, VA</b> - Dulles Amateur Radio Group (ARRL VEC) Walk-In Contact: Mike Weber WB8RDN (703)450-2304
<b>March 2 (Sunday)</b>	<b>Landover, MD</b> - D.C.M. ARC (ARRL VEC) Walk-In Contact: Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)
	<b>Elkins, WV</b> - (Mountain ARC VEC) Walk-In Contact: Walter Corley KF8SX (304)637-0506
<b>March 8 (Saturday)</b>	<b>Alexandria, VA</b> - Mt. Vernon ARC (Laurel VEC) Walk-In Contact: Frank Mackey K4EC (703)455-1510
	<b>Davidsonville, MD</b> - Anne Arundel Radio Club (Laurel VEC) Walk-In Contact: Bob Israel WC3I (301)262-5083



<b>March 15 (Saturday)</b>	<b>Laurel, MD</b> - Laurel ARC (Laurel VEC) Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM
	<b>Manchester, MD</b> - Hanover Area Hamming Assn (ARRL VEC) Walk-Ins accepted, Pre-Registration Encouraged Contact: Ed Daves (410)239-8488
	<b>Frederick, MD</b> - Mid-Atlantic DX & Repeater Association (ARRL VEC) Pre- Registration Desirable, Limited Walk-In. Contact the club voice BBS:301-473-4151 box 110 or E-Mail" veteam@aol.com"
<b>March 25 (Tuesday)</b>	<b>Glen Burnie, MD</b> - Maryland Mobileers ARC (Laurel VEC) Pre-Registration Requested, Walk-Ins Space Available Contact: Jerry Gavin NU3D (410)761-1423
<b>April 5 (Saturday)</b>	<b>Culpeper, VA</b> - (Unknown VE Organization)(ARRL VEC) Pre-Registration Preferred Contact: Bill Brown AC4KP (540)547-3089
<b>April 6 (Sunday)</b>	<b>Landover, MD</b> - D.C.M. ARC (W5YI VEC) Walk-In Contact: Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)
<b>April 12 (Saturday)</b>	<b>Alexandria, VA</b> - Mt. Vernon ARC (Laurel VEC) Walk-In Contact: Frank Mackey K4EC (703)455-1510
	<b>Cumberland, MD</b> - (Mountain ARC VEC) Walk-In Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674
	<b>Davidsonville, MD</b> - Anne Arundel Radio Club (Laurel VEC) Walk-In Contact: Bob Israel WC3I (301)262-5083
<b>April 19 (Saturday)</b>	<b>Laurel, MD</b> - Laurel ARC (Laurel VEC) Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM



<b>April 19 (Saturday)</b>	<b>Frederick, MD.</b> - Mid-Atlantic DX & Repeater Association (ARRL VEC) Pre- Registration Desirable, Limited Walk-In. Contact the club voice BBS: 301-473-4151 box 110 or E-Mail "veteam@aol.com"
<b>April 29 (Tuesday)</b>	<b>Annapolis, MD</b> - Maryland Mobileers ARC (Laurel VEC) Pre-Registration Requested, Walk-Ins Space Available Contact: Lois Turner KA3VVQ (410)647-4178
<b>May 4 (Sunday)</b>	<b>Landover, MD</b> - D.C.M. ARC (ARRL VEC) Walk-In Contact: Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)
	<b>Elkins, WV</b> - (Mountain ARC VEC) Walk-In Contact: Walter Corley KF8SX (304)637-0506
	<b>Hagerstown, MD</b> - Antietam ARA (Hamfest) (Mountain ARC VEC) Walk-In. Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674
<b>May 10 (Saturday)</b>	<b>Alexandria, VA</b> - Mt. Vernon ARC (Laurel VEC) Walk-In Contact: Frank Mackey K4EC (703)455-1510
	<b>Davidsonville, MD</b> - Anne Arundel Radio Club (Laurel VEC) Walk-In Contact: Bob Israel WC3I (301)262-5083
<b>May 17 (Saturday)</b>	<b>Laurel, MD</b> - Laurel ARC (Laurel VEC) Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM
	<b>Manchester, MD</b> - Hanover Area Hamming Assn (ARRL VEC) Walk-In accepted, Pre-Registration Encouraged Contact: Ed Daves (410)239-8488
	<b>Smithsburg, MD</b> - Mid-Atlantic DX & Repeater Association (ARRL VEC) Pre- Registration Desirable, Limited Walk-In. Contact the club voice BBS: 301-473-4151 box 110 or E-Mail "veteam@aol.com"
<b>May 27 (Tuesday)</b>	<b>Glen Burnie, MD</b> - Maryland Mobileers ARC (Laurel VEC) Pre-Registration Requested, Walk-Ins Space Available Contact: Jerry Gavin NU3D (410)761-1423



<b>June 1 (Sunday)</b>	<b>Landover, MD - D.C.M. ARC (W5YI VEC) Walk-In</b> Contact: Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)
<b>June 10 (Tuesday)</b>	<b>Annapolis, MD - Maryland Mobileers ARC (Laurel VEC)</b> Pre-Registration Requested, Walk-Ins Space Available Contact: Lois Turner KA3VVQ (410)647-4178
<b>June 14 (Saturday)</b>	<b>Alexandria, VA - Mt. Vernon ARC (Laurel VEC) Walk-In</b> Contact: Frank Mackey K4EC (703)455-1510
	<b>Cumberland, MD - (Mountain ARC VEC) Walk-In</b> Contact: Leo Patterson KQ8E (304)289-3576 Gay Rembold W3DFW (301)724-0674
	<b>Davidsonville, MD - Anne Arundel Radio Club (Laurel VEC)</b> Walk-In Contact: Bob Israel WC3I (301)262-5083
<b>June 21 (Saturday)</b>	<b>Laurel, MD - Laurel ARC (Laurel VEC)</b> Pre-Registration Desirable, Limited Walk-In Contact: John Creel WB3GXW (301)572-5124 after 6 PM
	<b>Manchester, MD - Hanover Area Hamming Assn (ARRL VEC)</b> Walk-In accepted, Pre-Registration Encouraged Contact: Ed Daves (410)239-8488
	<b>Frederick, MD - Mid-Atlantic DX &amp; Repeater Association (ARRL VEC)</b> Pre- Registration Desirable, Limited Walk-In. Contact the club voice BBS: .301-473-4151 box 110 or E-Mail "veteam@aol.com"
<b>July 6 (Sunday)</b>	<b>Landover, MD - D.C.M. ARC (ARRL VEC) Walk-In</b> Contact: Freddie Battle NG3G (202)546-9348 (Day) (301)773-2898 (Evening)
	<b>Elkins, WV - (Mountain ARC VEC) Walk-In</b> Contact: Walter Corley KF8SX (304)637-0506

***Don't forget to bring your license when upgrading!!***



## **-TRAINING CLASSES -**

***PLEASE SUBMIT ALL TRAINING CLASS ANNOUNCEMENTS TO THE TRAINING EDITOR, JOHN FORREST WZ4A, NOT TO THE AUTO CALL EDITOR.***

**NOVICE/TECHNICIAN COURSE** - Frederick, MD. The Mid-Atlantic DX & Repeater Association will offer a 12 week course leading to a Technician license. The course will be held in Frederick Maryland near Hood College. Classes will be held Wednesday Evenings from 7 - 9 PM. For information or to pre-register call the MADRA Voice BBS: 301- 473-4151 Box 105 or the MADRA web site "[members.aol.com/madraclub](http://members.aol.com/madraclub)" There is no cost for the class. The text book is the ARRL "Now You're Talking".

**NOVICE/TECHNICIAN COURSE** - Martinsburg, WV. The Mid-Atlantic DX & Repeater Association will offer a 12 week course leading to a Technician License. The class will be held in Martinsburg, MD Convenient to I-81. No start date has been set. To Register or to get more information, contact the MADRA Voice BBS: 301-473-4151 box 105 or the MADRA web site "<http://members.aol.com/madraclub>". There is no cost for the class. The text book is the ARRL "Now You're Talking".

**GENERAL/ADVANCED UPGRADE COURSE** - Frederick, MD. The Mid-Atlantic DX & Repeater Association will present an upgrade course for General and Advanced class theory. The Course will be held in Frederick, MD near Hood College on Wednesday Evenings from 7 - 9 PM. There is no charge for the course. The text will be the ARRL General and Advanced class theory manuals. For more information or to pre-register, contact the MADRA Voice BBS: 301-473-4151 box 105 or the MADRA web site, "<http://members.aol.com/madraclub>".

**GENERAL CLASS UPGRADE COURSE:** The Montgomery Amateur Radio Club will present an upgrade course for the General class license beginning March 6, 1997. Both theory and Morse code (from 5 wpm to 13 wpm) will be offered. The course will be held at Gaithersburg High School in Gaithersburg, MD. Classes will be held each Thursday from 7:00 until 9:00 beginning March 6 and ending with exams on May 1. There is no charge for the course; however, students will be required to provide their own study manuals. You may purchase the manual yourself or order it when you sign up for the class. "The ARRL General Class License Manual" will be used. For more information or to sign up, call Rocky at 301-216-5210 or Peggy at 301-330-0027.





# Volunteer Examiner Cooperative

## EXAM FEES:

- \* Check for appropriate exam fee. Fees and modes of payment for individual VECs and exam teams may vary.
- \* ARRL VEC exams cost \$6.25
- \* Laurel VEC exams are free
- \* Mountain VEC exams are free
- \* W5YI VEC exams cost \$6.25

## BRING TO EXAM:

- \* Picture identification
- \* Completed FCC form 610 (most VE teams will supply at exam)
- \* Original and a copy of current FCC amateur radio license
- \* Originals and copies of all active certificates of successful completion of prior exams
- \* Exam fee (check or cash depending on VE team)

## "GRANDFATHER" CREDIT FOR ELEMENT 3B (GENERAL WRITTEN):

- \* If you presently hold a Technician class license which was first issued prior to March 21, 1987, you may be grandfathered for Element 3B (General class written exam) by presenting the original and a copy of the license dated prior to March 21, 1987 to the VE team. It is your responsibility to prove that you are entitled to grandfathering. Do not lose your original license!

## RULES FOR SUBMISSIONS TO THE FAR VOLUNTEER EXAMINER COOPERATIVE:

1. All submissions must be in writing
2. Date and day of week must be specified for each exam date
3. Point of contact and phone number must be specified
4. Sponsor and location must be specified
5. VEC must be specified
6. Exam dates up to 12 months in advance will be accepted
7. Deadline for submission is 25th of the 2nd month prior to publication date (e.g., January 25 for March issue)



# Understanding ATV Bandwidths

By Rich, KA3BTD

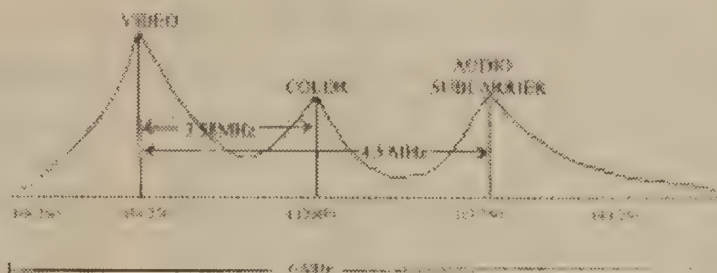
This article will give you a better understanding of ATV bandwidth and how interference will affect an ATV picture.

First you must understand that an ATV picture is 6 MHz wide. Metrovision's video carrier frequency is 439.250 MHz. Add 3.58 MHz to the video carrier frequency and that is where the color is located. Add 4.5 MHz to the same video carrier frequency and that is where the audio is located. Add about 1 MHz on the lower end of the video carrier frequency and add 1 MHz on the audio end and you come up with 6 MHz overall.

The total bandwidth will start at 438.250 MHz and end at 444.250 MHz. The most critical spectrum of an ATV signal is the color frequency area. In Metrovision's case it would be in all areas of 442 and 443 MHz. Metrovision's input frequency is 426.250 MHz and requires the same 6 MHz bandwidth.

Interference 40 db below the desired signal can be seen in the video. Interference from amateurs who are unaware of the presence of the ATV signal can wipe out the sound or color or put diagonal lines in the picture. Personally at times I have experienced very high interference levels that have completely wiped out my entire ATV picture and audio. Anyone using packet or a 70 cm repeater within the ATV spectrum will cause harmful interference. All packet and repeaters should be coordinated with the proper coordinating committee. We all know interference is no fun no matter which band or mode your using.

I hope the above information will be of help to you. Remember just because the band sounds like there is nothing there it may very well be in use.



## 1997-1998 SCHOLARSHIP COMPETITION NOW OPEN

**THE FOUNDATION FOR AMATEUR RADIO, INC.**, a non-profit organization with headquarters in Washington, D.C., plans to administer sixty (60) scholarships for the academic year 1997 - 1998 to assist licensed Radio Amateurs. The Foundation, composed of over seventy-five local area Amateur Radio Clubs, fully funds five of these scholarships with the income from grants and its annual Hamfest. The remaining fifty-five (55) are administered by the Foundation without cost to the various donors.

Licensed Radio Amateurs may compete for these awards if they plan to pursue a full-time course of studies beyond high school and are enrolled in or have been accepted for enrollment at an accredited university, college or technical school. The awards range from \$500 to \$2500 with preference given in some cases to residents of specified geographical areas or the pursuit of certain study programs. Clubs, especially those in **Delaware, Florida, Maine, Maryland, New Jersey, Ohio, Pennsylvania, Texas, Virginia and Wisconsin**, are encouraged to announce these opportunities at their meetings, in their club newsletters, during training classes, on their nets and on their world wide web home pages.

Additional information and an application form may be requested by letter or QSI, card, postmarked prior to April 30, 1997 from:

**FAR Scholarships, 6903 Rhode Island Avenue, College Park, MD 20740**



# Simplex (Calling) Frequencies in the NCAC Area

Frequency	Area	Used by	Mode	Comments
145.550	ALL Area-wide	Shuttle/MIR	Packet	
145.730	ALL Area-wide	ARES	Packet	RACES/ARES/Skywarn
145.750	ALL Area-wide	ARES	Packet	RACES/ARES tcp/ip
145.790	ALL Area-wide	APRS	Packet	
147.450	ALL Area-wide	NASA Audio	Voice	
146.505	DC Washington	ARES	Voice	
147.585	DC Washington	ARES	Voice	
446.025	DC Washington	ARES	Voice	
145.750	MD Statewide	ARES	Packet	RACES EOC network
146.430	MD Anne Arundel	local	Voice	
146.430	MD Columbia	local	Voice	"AARC"
146.460	MD Montgomery#1	RACES/ARES	Voice	
146.475	MD Carroll	ARES	Voice	
146.580	MD Frederick	ARES	Voice	
146.580	MD Ft. Meade	local	Voice	"Free State ARC"
147.480	MD Carroll	ARES	Voice	
147.495	MD Anne Arundel	local	Voice	"MD Mobileers"
147.510	MD Montgomery#2	RACES/ARES	Voice	
147.540	MD Laurel	local	Voice	
147.555	MD Greenbelt	local	Voice	
144.970	VA Alexandria	replexer	ATV	repeater audio in/out
144.990	VA Woodbridge	ARES	Simplex	Rptr CTCSS 100.0
146.415	VA Fairfax #5	ARES	Voice	
146.415	VA Mt. Vernon	ARES	Voice	
146.430	VA Arlington	ARES	Voice	
146.430	VA Fauquier #1	ARES	Voice	
146.475	VA Pr. Wm.	ARES	Voice	
146.490	VA Alexandria	ARES	Voice	
146.565	VA Fairfax #4	ARES	Voice	
146.580	VA Arlington	local	Voice	
146.595	VA Fairfax #3	ARES	Voice	
147.435	VA Fairfax #2	ARES	Voice	
147.450	VA Fauquier #2	ARES	Voice	
147.495	VA Fairfax #1	ARES	Voice	
147.525	VA Pr. Wm.	ARES	Voice	
445.925	VA Fairfax #6	ARES	Voice	
445.950	VA Arlington	ARES	Voice	
446.050	VA Alexandria	ARES	Voice	

The "National Simplex (Calling) Frequencies" are: 146.520, 223.500, and 446.000.

Frequencies listed as "simplex voice" but used by packet are: 147.570 446.075.

Frequency uses inconsistent with the band plan have been omitted. Band plans for this area can be found at [www.t-marc.org](http://www.t-marc.org). On-line versions of this list can be found at [www.t-marc.org](http://www.t-marc.org) and [www.aresva.org](http://www.aresva.org) (in the "District 2 — NCAC" section).

Send comments/updates to Ross Z. Merlin WA2WDT [ross.merlin@usa.net](mailto:ross.merlin@usa.net)



**EEB**

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**Vienna, VA.**

**703.938.3350**

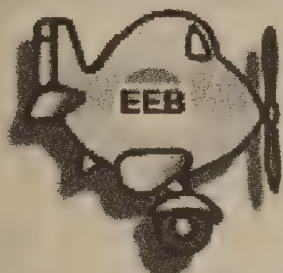
**[www.access.digex.net/~eeb](http://www.access.digex.net/~eeb)**



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# ANNOUNCING THE 1997 GREATER BALTIMORE HAMBOREE AND COMPUTERFEST

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Outside the State of Maryland, Dial 1-800-HAM-FEST (1-800-426-3378), E-Mail at  
[gbhc@concentric.net](mailto:gbhc@concentric.net), Internet Home Page at [www.concentric.net/~gbhc](http://www.concentric.net/~gbhc)



**NEWS RELEASE: DISTRIBUTE WIDELY, TELL EVERYONE!**

The Herndon Repeater Group has been renamed,  
reorganized and rejuvenated into the:

## **DULLES AMATEUR RADIO GROUP**

Please read our monthly column in Auto-Call for up-to-date details.  
Here are some of the highlights:

- Membership in DARG includes a subscription to AUTO-CALL.
- Access to the auto-patch on the 145.31 Mhz. Dulles Airport N4FSC repeater.
- On-the-air DARG meetings on our net, Tuesdays @ 8PM on the Dulles Airport repeater.
- Packet BBS (N4WJN BBS on 145.03 Mhz).
- Internet Web site (in development).
- All licensed family members in the same household are covered under one paid membership.
- Membership handbook.

In addition:

- we hold monthly seminars, open to the public, on a topic of interest related to Amateur Radio or other technical topics.
- we have monthly dinners at various area restaurants.
- we hold picnics and a yearly Holiday Party with a raffle.
- we have an active ARRL/VEC exam team and several exam sessions each year.
- we have very active participation in Field Day.

Check out the new Dulles Amateur Radio Group and join our group of over 100 current members. We believe you will find DARG a family oriented organization and different from many of the other area clubs. DARG can be reached at:

**Dulles Amateur Radio Group (DARG)**  
**PO Box 5073 Herndon, VA 20172-1964**  
**call Mike WB8RDN at (703) 450-2304**  
**or Bill W3EMH at (703) 444-2936**

**Thank you for taking the time to read this from the  
membership of the new Dulles Amateur Radio Group!**



# Maryland Radio Center

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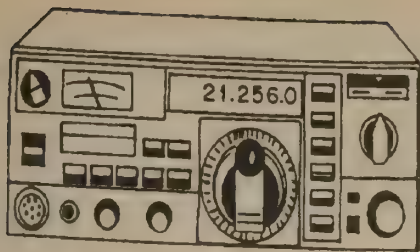
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# 1997 Virginia QSO Party

Sponsored by the  
**Sterling Park Amateur Radio Club**  
Call Box 599, Sterling VA, 20167

## Contest Rules

March 15-17, 1997. Contest times are from 1800 UTC on March 15 through 0500 UTC on the 16th, and from 1100 UTC March 16th through 0200 UTC on March 17. Submit logs by April 15, 1997 to the VA QSO Party, Call Box 5997 Sterling VA 20167.

Work fixed stations once per band/mode. Out-of-State stations work Virginia stations only. No cross-mode or repeater QSO's. Work VA mobiles in each county that they operate. Mobiles or fixed stations on county lines count as one QSO and as many county multipliers as they offer. Stations in Virginia independent cities select one bordering county as county multiplier. Count fixed stations only once as multipliers. VA mobiles receive a bonus of 100 additional points for each Virginia county in which they log a valid QSO. Fixed and Mobile operation will be considered separately. Spotting nets, DX clusters, etc., may be used to locate other stations - no self spotting permitted. All operators must observe the limits of their operator's license. Multi-Operator stations should indicate all operators by call sign.

Follow standard AML contest guidelines. Paper Logs, Summary and Dupe sheets required; No disks please. Summary sheet should include name, mailing address, call sign, number of counties in which operated, license class, club name and a signed statement that all contest rules and regulations have been observed. QRP stations please include a signed statement that transmitter output power was 5 watts or less at all times. Dupe sheets by band and mode are required for 200 or more QSOs. For Club Competition (minimum of 3 valid club entries), be sure to indicate club name on summary sheet and log. Contestants using computer logging and reporting software are required to verify scoring and duping to ensure contest rules have been followed.

## Operator Categories

**Single Operator** - One person performs all operating and only one transmitter may be on the air at a time. **Mobile** - Single or Multiple individuals operating Mobile under a single call sign with only one transmitter on the air at a time. **Club** - Minimum of three valid contest entries each indicating club affiliation. Single Operator / Multi Transmitter and Multi-Operator / Multi Transmitter stations will be in separate categories and may submit logs for certificate consideration.

## Frequencies

160 meters and up, except no WARC band QSO's permitted. Suggested frequencies: CW 1805 KHz and 50 KHz up from band edge on others. PHONE - 1845, 3860, 7260, 14260, 21360 and 28360 KHz. Novice/Tech Plus-10 KHz up from the edge of the CW band and 28360 KHz on PHONE. VHF - 50.125, 147.48 and 223.50 MHz. U•-446.00 MHz. All frequencies plus or minus QRM and nets. No Repeater or cross-mode QSO's.

*Continued next page*



## Exchange

Exchange QSO number and QTH (County for VA stations; state, province or DX county for others). VA mobile stations log QSO's by county of operation. Identify all QSO's with band/mode, sequential QSO number sent/received and date/time of contact in UTC.

## Scoring

Count 1 point per Phone, 2 points per CW, and 3 points per VA mobile QSO (Phone or CU1). Virginia fixed stations multiply QSO points by the total number of VA counties, U. S., Canadian provinces and DX countries. No extra multiplier for U.S.: VE, KH6 or KL7 (count as states or provinces only). Mobiles add to the Virginia fixed station score 100 bonus points for each Virginia county in which a valid QSO was logged. Outside of VA, multiply QSO points by the number of VA counties worked (maximum of 95) to obtain final score.

## ARRL Standard Contest Guidelines

Make sure your log details the date, time, band, call sign and complete exchange sent and received, for each QSO claimed for contest credit. Your summary sheet should indicate your score, including how you figured it, and a declaration that you followed FCC/DOC regulations and the contest rules. Your name, call sign and complete address should be typed or printed in block letters. Crossband, crossmode and repeater contacts are usually not permitted. Contacts with the same station on different bands are usually permitted. Your log should be checked carefully for duplicate QSOs; and if more than 200 QSOs are made, dupe sheet should be included with your entry. Your log may be considered a check log or disqualified if too many errors are detected by the contest committee. Avoid standard net frequencies. International contests generally offer awards to top scorers from each US call area and each country, state QSO party to each state/province. Your summary sheet should include the following statement "I have observed all competition rules and all regulations established for Amateur Radio in my country." The declaration should be signed and dated.

## AWARDS

**Plaques:** High Virginia Single Operator All Mode Awarded to the Virginia Single Operator Fixed Station with the highest total score. High Virginia Mobile Awarded to the Virginia Mobile Station with the highest total score resulting from only Mobile operation. High Virginia Club Combined Score Awarded to the Virginia Club (minimum of three valid club member entries) with the highest total combined club member scores. High Single Operator VHF Only Awarded to the Single Operator Station with the highest total score resulting from only VHF (1.25, 2 • 6 meter) operation. High Single Operator QRP All Mode Awarded to the Single Operator Station with the highest total score resulting from only QRP (output RF power less than 5 watts at all times) operation. High Single Operator Outside Virginia All Mode Awarded to the Single Operator Station located outside the state of Virginia with the highest total score. High Single Operator Novice/Tech All Mode Awarded to the Single Operator station receiving the highest total score where the operator holds a valid Novice, Technician or Technician Plus License. High Single Operator CW Only Awarded to the Single Operator Station with the highest total score resulting from only CW operation. **Certificates:** High Score State, High Score DX, High Score Virginia County, High Virginia Multiple Operator All Mode.





## Antietam Radio Association

**Meetings:** First and Third Tuesday of the month at 8 p.m. in the Conference Room at the Washington County Regional Airport, Showalter Road, Hagerstown, Maryland.

**Mailing Address:** P.O. Box 52, Hagerstown, MD. 21741

**Nets:** Tuesday 7 p.m. 146.940 MHz.; Wednesday 7 p.m. 447.975 MHz.; Thursday 7 p.m. 147.090 MHz.

**Repeaters:** 147.09+ and 146.94 -.

**Information:** Donnie Sue Mulligan/  
KB3AOO (301) 582-2984

Remember the BLIZZARD of '96? This January was a lot better than last year's first month. January 6th through the 12th, 1996, in Washington County, and all over, we had 43 inches of snow. I have not forgotten, have you?

Gary Swales/N3VDU has resigned as ARES Emergency Coordinator because of his having too many irons in the fire and having too much paperwork to do. We want to say THANKS to Gary for all he has done for the club, community, and HAMs. We need someone to replace Gary. Hope we can get another HAM to volunteer that will do the job as well as you have, Gary.

Ted Lawhead/WA3AAT resigned the committee of the MD/DC QSO PARTY. THANKS, Ted for all you have done in the four or five years you have helped Page Pyne/WA3EOP on the MD/DC QSO PARTY. We also need someone to replace Ted. Hope we find another volunteer that will do the job you have in the past years, Ted.

ARRL-VE EXAMS were given at Hagerstown Junior College on Sunday January 26, 1997. We had a SUPER SESSION, it happened on the day

of the big game. There were 17 that showed up for the tests, and many passed and/or upgraded. The following are the ones that signed their consent for the Antietam Radio Association to publish/announce their success:

George Carpenter, Jr. passed the 20 WPM Code Test. John Begg passed the 20 WPM Code and Advanced Test. Greg Barry passed 13 WPM Code and General Test. Scott Nearhood passed the Technician Test. Michael J. Repko passed the Technician Test. Mary Jamison passed the No-Code Technician Test. Bruce J. Smith, 3rd passed the No-Code Technician Test and 13-year-old Bruce J. Smith, 4th passed the Novice Test. Thanks to all that passed and gave their consent for me to publish this list. There were others that passed and some that failed.

I took the 13 WPM Code Test and I failed AGAIN. One of these days, I will pass my 13 WPM and you will hear about it, LOUD and CLEAR! Just want to say thank you to Bob, Ted, Page, John, Reggie, and Cliff, the VEs that were there. They did a wonderful job.

Have a good and green St. Patrick's Day and don't forget to welcome SPRING on the 20th.

Until the next time...

73, Donnie Sue/KB3AOO

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## Baltimore Amateur Radio Club

**Meetings:** Meetings: Twice monthly, 7:30 pm at Towson Presbyterian Church, Chesapeake and Highland Avenues, Towson, Md.. -First Wednesday of the month -business meeting, Third Wednesday of the month - program.

**Repeaters:** W3FT/RPTR 146.67(-), 224.24 (-) (no PL) and 449.625(-)(PL 107.2) Note: two meter/220 Mhz. repeaters are linked.

**Club Net:** Every Tuesday night at 8:30 pm on 146.67/224.24.

**NTS Net:** Daily at 6:30 pm on 146.670/224.240

**Club BBS:** (410) 252-6238 (min. 2400 baud)

**Information:** (410) HAMTALK

**Greater Baltimore Hamboree & Computerfest/Maryland State ARRL Convention information:** (410) HAM-FEST or (800) HAM-FEST.

**Club Address:** BARC, Inc., P.O. BOX 120, Reisterstown MD 21136

Full information is available on Internet at <http://www.concentric.net/~gbhc> or call our telephone response system at 410-ham-fest.

While the hamboree and convention is consuming a lot of our time, we've also been involved other ways. The Minifest on the evening of January 15 was a success. This is a free mini hamfest, with mostly tailgate type of merchandise, and few commercial dealers. Lots of time was used for good old fashioned chatting face to face. Mark your calendar for the third Wednesday of January next year, and don't miss this FREE event!! Open to the public!! Many club members continue to participate in ARES and RACES activities, including monthly drills, and several participate in the NTS net at 6:30 PM on the 146.67 repeater. The weekly club net is now devoted to training and discussion topics such as maintaining antennas in weather, preparing equipment for field operation in how-to format.

After the hamboree, our next big activity will be Field Day 1997, this coming June. See you at the hamboree and we look forward to the FD QSO from W3FT.

73 de Doug, N3VEJ

Spring is coming, and thoughts are turning to hamfests. The Greater Baltimore Hamboree and Computerfest, Host to the Maryland State Convention is coming up, April 5th and 6th. Last year, our 25th anniversary show, was the largest yet. Three buildings of commercial dealers, nearly 200 indoor tailgating spaces and 600 outdoor spaces means two full days of shopping fun.

The convention brings ARRL representatives and technical presentations to the local ham. This year's convention will feature: Bob Bruninga (WB4APR) on APRS; Kay Craigie & Bernie Fuller for the ARRL Forum; and Steve Ford (WB8IMY) from ARRL, on the Phase 3D satellite.

In addition to all this, amateur radio license testing will be conducted on Sunday morning, on the fairgrounds premises. Pre-register by dropping a note to GBHC attn Testing, PO Box 95, Timonium, MD, 21094-0095.



## Capital City Amateur Radio Society

**Meetings:** 3rd Saturday of each month at 1200 hours at the Woodridge Public Library, 18th and Rhode Island Ave, N.E., Washington, D.C. Visitors welcome.

**Repeater:** W3EIL 144.51/145.11 MHz, open.  
**Nets:** Regular net Wednesday at 2000 hrs, RTTY net Thursdays 2100 hrs, voice portion 2145 hrs, all on 145.110.

**Mailing Address:** CCARS, 1719 Franklin Street, N.E. Washington, DC 20018-2033.

**Information:** Steve, W3ETX, (202) 526-1329 or Chester, W3EIL (202) 529-9598.



CCARS will celebrate it's Birthday with a Party at Ft. McNair Officers Club February 19, 1997 from 6 to 9 p.m. All members are invited with guest. Contact your president for additional information.

One of our faithful club members became a Silent Key. Jackson Davis KB3KI passed in December 1996. "Jack" had made arrangements for CCARS Birthday Party.

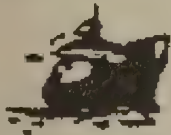
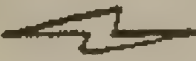
Chester W3EIL is enjoying his new Kenwood HF rig. We know he will have many happy hours of QSO's. Joe K3UAL has reconstructed his station after having to dismantle it for repairs in his basement. The Morning Show is still going strong on the club repeater on 145.11 each morning shepherded by "Shep" WB3KIC.

Our new Ham and club member "Bree" N3YAJ has been quite active on the repeater. Sharyn K3DOF is making rapid progress from her latest illness. Happy to QSO with Junatia N3NQC on her way to work, who has made remarkable progress from her illness. "Gus" KE3NY still making that daily trip to Cockisville, Md.

"Ed" W3HQ has a new addition to the family for his Xmas present little "Bunny" a Yorkshire Terrier. We understand "Clem" K3UAM is reerecting his HF antennas. Hope to see him on HF soon.

Joe K3UAL

## Chapter X

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## Central Maryland Amateur Radio Club

**Meetings:** 4th Friday of the month at 7:30pm, at the Doctors Community Hospital, 8118 Good Luck Road, Lanham, MD (no meeting in December). Enter in the Outpatient Testing entrance across from the Emergency Room entrance behind the main building. Take the elevator to the 5th floor and exit left, the meeting room (DSE Room) is on the right.

**Repeater:** N3EZD/R 145.230 MHz.

**Net:** Every Tuesday, 9:30pm, 145.230 MHz repeater.

**Mailing Address:** Central Maryland Amateur Radio Club, P. O. Box 788, Greenbelt, MD 20768-0788.

**Information:** Jim Tilton, Pres. - KD3JA, (301) 552-0012.)

CMARC's regular January meeting was held at the Historical Electronics Museum (HEM). After a brief business meeting, the club was treated to a Amateur Television demonstration, followed by a tour of the museum. The HEM features a wide range of electronic exhibits, with a heavier concentration on radar and microwaves. Also included are interesting displays of the original Edison cylinder phonograph and military cipher/decipher machines. A special treat was a demonstration of a bearingless motor that was suspended in mid-air by a magnetic field. CMARC thanks the HEM for providing a memorable program.

At CMARC's regular November meeting, CMARC's President, Jim/KD3JA was authorized to write a letter of objection to the proposed coordination of a repeater in Hagerstown, Maryland, on the same frequencies as the repeater operated by CMARC just outside of New Carrollton, MD. With conflicting information on the exact physical location of the repeater on South



Mountain to the east of Hagerstown, CMARC was concerned about the interference potential of the repeater. It was also felt that R. F. output power, reported by T-MARC to be 200 Watts ERP, was excessive for a local coverage repeater. It was hoped that the letter of objection would lead to a clarification of the location of the proposed repeater and why 200 Watts ERP was required for a local coverage repeater, plus commitments from T-MARC and the repeater sponsor to work cooperatively with us in conducting technical tests to specifically determine the interference potential between the two repeaters.

After several initially fruitless exchanges with the T-MARC Frequency Coordinating Committee Chairman, we finally received revised latitude and longitude coordinates for the proposed Hagerstown repeater. We were pleased to see that these coordinates did not conflict with the above mean sea level figure, as had the original coordinates. (They also shifted the location of the repeater by some 2 miles!)

Armed with this information we proceeded to conduct an informal field test to assess the interference potential. We were found that the interference potential appears to be fairly low.

We were also pleased to accidentally run into the Hagerstown repeater sponsor on the 2-meter band while we were conducting the test. He was happy to clarify his plans for his repeater. It is to have only a 15 watt R. F. output into a 9 dB gain antenna, and it is intended to be local coverage repeater for the valley surrounding Hagerstown, Maryland. He also seemed willing to cooperate with us in propagation tests once the repeater is installed at its final location, but noted that any talk about interference was "flailing at the wind" until the repeater is actually in place.

The bottom line is that having finally received accurate information concerning the proposed repeater, and having finally been able to talk directly with the Hagerstown repeater sponsor, we now feel that it is likely that our CMARC repeater

and the new Hagerstown repeater can be good neighbors and share the same frequencies with minimal mutual interference. However, we would still like to see confirming interference tests once the repeater is installed in its final location before we withdraw our formal objection and endorse the coordination of this new repeater.

73 de Jim/KD3JA



## Columbia Amateur Radio Association

**Club meeting:** 4th Tuesday of the month at 7:30 p.m., at the Bethany United Methodist Church, Bethany Lane, Ellicott City.

**Net:** 147.135 repeater at 8:30 p.m. each Tuesday except for meeting nights.

**Repeaters:** 147.735/147.135 (cross-linked to 222.32/223.92); 147.990/147.390 (direct dial 911); 222.32/223.92 (cross-linked to 147.735/147.135); and 443.275/448.275.

**Information:** Bob Scarburgh, Pres - KC3EV, (410) 465-2421.

**Mailing:** P.O. Box 911, Columbia, MD 21044

At the November meeting, the following officers were elected:

Pres.	Bob Scarburgh/KC3EV
V-Pres.	John Pinkston/W3GJN
Treas.	Dick Frank/W9RZ
Secy.	Dan Goulette/N3LDC
Mbr-a-large	Joe Massi/KB2JG

Congratulations to everyone!!

As usual, we skipped December and held our annual winter dinner on January 25th, at the Bethany United Methodist Church in Ellicott City. Dionne/KA3ZDL and Joyce/KE3MP organized the event and did a great job as usual. There was plenty of good food to choose from. Our new officers were installed and awards presented to members making



significant contributions to the club. A good time was had by all.

The results of the Maryland/DC QSO Party are in and CARA came in 2nd, relinquishing it's first place position to the Laurel ARC.

The monthly CARA breakfast will resume on February 8th, at Jillys's Restaurant in Ellicott City. For reservations call Dionne at 531-2933, or Joyce at 9928209

Until later, 73's, Jean Williams-KB3AOT



### Digital Mid-Atlantic Radio Council

**Annual Membership Meeting:** Saturday, 8 March, 1 PM at the Prince George's County EOC, Seat Pleasant, Maryland.

**Address:** P.O. Box 73, Accokeek, MD 20607.

Want to learn about the latest changes in the digital band plans for this area? Are you wondering what the current state of the packet network is? Interested in the newest applications of APRS? If you answered YES to any one of these questions then please accept our invitation to attend the DMARC annual membership meeting! We will be holding this event on Saturday, 8 March in Seat Pleasant, Maryland (near the US Air Arena) beginning at 1 PM.

The meeting will be held at the Prince George's County Central Communications Facility (EOC) on Anchor Street. From the Capital Beltway (I-95), take the Central Avenue exit and proceed west on Route 214 (inside the beltway) for about 1.5 miles. Turn right on Jonquil Avenue, go one block to Anchor Street and turn right into the EOC parking lot. After parking in the designated spots for visitors, enter building using the door located behind the flagpole. The EOC is located on the

second floor. Talk-in will be available on the 147.18 MHz repeater and 146.52 MHz simplex (for close-in directions) and refreshments will be served.

This year, the Board of Directors of DMARC are working hard to improve the digital infrastructure in the Mid-Atlantic area and assist all digital mode enthusiasts by helping to minimize unintended mutual interference through effective band planning efforts. In partnership with T-MARC, DMARC is committed to making a positive impact in this critical area to ensure that every ham has the best possible chance to enjoy his or her specific interest area. At this meeting, we will talk about our recent band planning agreement and assignment of digital frequencies on the 2-meter and 440 MHz bands. Digital band planning activities, including researching spectrum utilization and projecting growth trends, have long been a focus of DMARC and will continue in 1997. We need your input and assistance to ensure that this valuable work continues.

In 1997, DMARC plans to continue its focus on education, innovation and leadership. The Mid-Atlantic area needs a strong, energetic organization that champions digital mode technology and operations. Do you agree? If so, as we suspect, then DMARC is for you! We need new members who care about amateur radio digital mode development. Please consider coming to our membership meeting and learning more about how you can help. Our membership dues are very low and are used exclusively to promote ham digital growth. All new members signing up at this meeting will be given a free copy of the 1997 edition of "The DMARC Mid-Atlantic Digital Resource Guide".

Whether you are a packet user, DX Cluster operator/user, BBS sysop, APRS enthusiast, spread spectrum guru or just enjoy tinkering with digital projects, we need your support. Please consider coming to our meeting and helping us out - we hope to see you on 8 March!





## Dulles Amateur Radio Group

**On-the-air meeting:** Tuesdays at 8:00 p.m. on the Dulles Airport repeater.

**Repeater:** N4FSC, 145.310 (Dulles Airport)

**Mailing:** Dulles Amateur Radio Group, P.O. Box 5073, Herndon, VA 20172-1964

**Information:** Mike Weber, WB8RDN, 703-450-2304

The Dulles Amateur Radio Group (DARG) is a family-oriented ham radio club affiliated with the N4FSC repeater in Dulles, VA. Membership is open to all, and the club holds several social and operating events each year.

Dues are \$20/yr for your entire family; members have access to the repeater's autopatch, and dues include a subscription or renewal to AutoCall. All area hams are warmly invited to join our information net on Tuesday evenings at 8:00pm.

Dulles Repeater Group held a Skywarn training session, which was attended by over 60 people, including many non-hams. The class was a great success, and most participants signed up as certified Skywarn observers.

In February, DARG will sponsor a technical session featuring the Emergency Coordinators from Fairfax and Loudoun counties. The subject is ARES, and all area hams are warmly invited. Details on the Tuesday net.

DARG will host an exam session on March 1st. Listen on the Tuesday evening net or call for more details.

73 de Mike, N4PDY



## Fauquier Amateur Radio Association

**Meeting:** 7:30 p.m., Second Thursday of the month except July, August and December. Crestar Bank, Warrenton Ctr, Warrenton VA.

**Breakfast:** Last Saturday of the month at Western Sizzlin Warrenton VA 8:00 - 9:30 a.m.

**Net:** Every Wednesday, 9:00 p.m., 147.165 Mhz NZ4N Repeater.

**Packet:** KE4YVU FARA7 node 145.070 Mhz with direct connect to FBBS9, FBBS9 Bulletin Board 145.090 Mhz, FARA9 node 145.090 Mhz.

**Repeater:** NZ4N/R 147.165 Mhz (+.600).

**Newsletter:** TOROID, Monthly. Deadline for submissions: 20th of the month.

**Information:** Neil Spokes, AB4YK, 540 364 3861. FARA, PO Box 752, Warrenton VA 20186.

**Internet:** [www.mnsinc.com/ki4ro/fara.htm](http://www.mnsinc.com/ki4ro/fara.htm)

**Next meeting:** March 13.

Fauquier Amateur Radio Association's first meeting for 1997 was very well attended after a one week delay for inclement weather. Larry, K4LLQ, made an excellent presentation on Grounding. Many of us are taking a second look at the adequacy of our shack's grounding in the light of Larry's inputs. We were greatly impressed with the plush comfort of the new surroundings at the Crestar Bank.

In 1996 we conserved cash by having many members get their newsletter by email. Additionally, we will continue to run the Giant Food fund raiser coupons program quarterly. For every \$100 of food bought with the coupons the club gets \$5. This is an idea that other clubs in the area might wish to try. It's good for Giant, it's good for us. The FARA breakfast will be at a later time: 8:00 am (see header for details). OK so we were not really a chipper at 7:30 as we should have



been and the first 8:00 am turnout was terrific. We saw both old faces and new. Quite a good YL/XYL and harmonics turnout, too. FAR members, don't be shy about coming on over to good old Warrenton to visit with us. See you at 8:00 on March 29.

There was quite a bit of interest among those present at the January meeting in upgrading to General. As a consequence of this, we will include a General class program in addition to the Novice/Tech video course. Classes started February 20 and will be well under way when you read this. Dan, N7DC, has volunteered to teach the CW classes including the possibility of using the repeater as a medium for one and two-way CW communications. We might want to use a 220 repeater so that Novices can be included and hold live QSO's. There are plans to build TX/RX kits for this.

We will be exploring the potential of getting space for a "home base" at the Vint Hill Farm Station which is closing this September. We are bit worried by costs of heating, maintenance and insurance.

Interest in satellite-related ham activities is escalating. The launch of the Phase 3D satellite later this year is anxiously awaited. Will Marchant, KC6ROL, who is with AMSAT, described some special activities that he is organizing this year involving SAREX, Civil Air Patrol and a program to interest school children in the ham radio hobby (the CAP nets are pretty dry stuff according to those who have been involved in them). The FARA classes will be made available to school children starting with the classes in February.

We, at FARA, are gearing up for an FCC EXAM May 1: Candidates and VE's please mark your calendars. If FAR members have been thinking of signing up as an ARRL VE, do it now. Existing ARRL VEs, please check to be sure your ARRL validation is current. W5YI and Laurel VE's call ARRL and get approvals. General, Advance and Extra class hams who would like to

be VE's talk to Neil AB4YK for more information: Tel 540 364 3861.

John, KI4RO, reports that early this year his Dad had a quadruple bypass. He survived and is doing very very well, thank you. Visits were arranged to Michigan and with the help of a gift of a hamstick and an HF rig, John got hooked on HF mobile during the commutes. John and Bonnie, his XYL, had an absolute blast chatting with the fellows on ECARS and MIDCARS all the way up and back. Later on, John purchased an MFJ 9420 (10 watt PEP SSB barebones transceiver), and a 20 meter hamstick with one of those triple magnet magmounts to hold it to the roof of the GEO. Running it off a GelCel got rid of most of the automobile racket.

Now John reports that he's having a ball chasing DX from the car on the way to and from his office at Sallie Mae. He has bagged a number of European, Caribbean and South American stations with it. Most stations are absolutely amazed at the fact that he's only running 10 watts PEP and with the amount of punch that the audio has. A CW module is available, but John hasn't gotten up enough nerve to try CW in the middle of rush hour! He encourages us all to try some HF mobile.

For more information about the MFJ 9420 and Hamstick antennas available from the Ham Radio Page of the club Web Site at <[www.mnsinc.com/ki4ro/fara.htm](http://www.mnsinc.com/ki4ro/fara.htm)>.

Neil AB4YK, Secretary FARA



Reminder - all submissions for



are due no later than  
the 1st of the month prior to the  
month of publication!!





## Goddard Amateur Radio Club, Inc.

**Meeting:** Third Wednesday of each month at 5:00 p.m. at the Goddard Amateur Radio Club station, Soil Conservation Road, Greenbelt, MD, across from the Soil Conservation Road gate of the Goddard Space Flight Center. This road may be accessed from either Route 193, Greenbelt Road, or Powder Mill Road.

**Net:** Information net is held every Thursday evening at 9:00 p.m. local time. All amateur radio operators are welcomed. Net Control is Don Bennett, W3MIK

**Repeater:** 146.835 Mhz.

**Information:** Jim Blackwell, N3KWU, (301) 286-4534; Vikki Gigante-Hueber, KA3PVS, (301) 249-2609.

The Goddard Amateur Radio Club is keeping very busy. In addition to Shuttle Missions, of which there are three in the first four months of this year: STS-81, MIR Docking mission, which we just completed, thanks to the efforts of Joe Grzesik, Bill Graettinger, Don Bennett (hope the cold is better, Don!), Marty Brown, John Gainsborough, Morris Beale, Robert DiRosario, John Stolarik, Stan Siuta, Chuck Garrison, Al Nollemyer, Henry Herman and Emil Hymowitz; STS-82, the Hubble Repair Mission, which is scheduled for February 11 at 3:56 a.m. with landing at February 21, 2:43 a.m.; and STS-83, Microgravity Science Lab I, scheduled to launch on April 3 at 2:01 p.m., with landing April 19, at 7:30 a.m..

We are also participating in FAR's Adopt-A-School Program, sponsoring both DuVal High School in Greenbelt and Bowie High School in Bowie in putting amateur radio equipment and clubs together at these schools.

Hugh O'Donnell, John Stolarik and John Klim will be teaching a novice/tech class at DuVal beginning in February. There will also be an evening class at GARC beginning in February. I

believe this class will be on Wednesday nights at 5:30 at the club station. John Baugus is also offering a novice/tech class at the Police Station on Route 170 in Odenton, Maryland at 3:30 on Sunday afternoons. This class is just beginning so there is plenty of time to get started for those who are interested. He will also offer an upgrade class beginning in the middle of April on Sunday afternoons at the same location.

The GARC is also in the process of revamping its storage situation and rebuilding some antennas. Finally, we will be at some hamfests this season beginning with the BARC Hamboree on April 5th. Come see us! Also, we welcome any visitors during shuttle retransmission to come and see our operations!

Vikki Gigante, KA3PVS



## Green Mountain Repeater Association

**Meetings:** Board of Directors, Last Monday of each month.

**Repeaters:** KD3VR-146.61 (Cheverly), K3GXF-146.88 (Greenbelt).

**Luncheon:** First Saturday of each month at the Fountain Cafe, in the Laurel Shopping Center Mall, US Route 1 (Baltimore Ave.) and Cherry Lane. Starts at 11:30 AM. Monitor 146.88 for Talk-In.

**Nets:** Old Gents Net meets on 146.88 each day at 9:30 A.M. and 6:30 P.M. Washington Adventist Amateur Radio Association Net meets on 146.88 each Thursday at 9:30 P.M.

**Mail:** P.O. Box 523, Bowie, MD 20718-0523.

**Information:** John Williams, N5SJZ, (301) 805-5761.

GMRA held it's regular monthly luncheon social on Saturday, January 4th, 1997, at the Laurel Center shopping mall. there were approximately 26 members, relatives and guests on hand.



Strangely enough, on that same day the new repeater was to be installed at the 146.88 site. Due to unavoidable circumstances, that was not to be.

Joe, KD3VR, has had the new repeaters at his home since they were acquired at the Timonium Hamfest last year. Joe spent many hours cleaning, installing some components, tuning and aligning the units.

Roy, N3NGA helped in the aligning with furnishing special test equipment. Thanks to others that also helped.

Here comes the good part. the two repeaters were to be installed one week apart, on the 4th and the 11th of the month. Paul, W3HFA, removed the controller from the 146.88 site and took it to KD3VR's on Friday night, the 10th of January. They returned that same night and installed the new unit before 11 P.M.

Murray, K3BEQ removed the controller from the 146.61 site on Saturday, January 11th took it also to - KD3VR's and they returned to the Cheverly site and installed the new repeater that morning. Both repeaters were installed in less than 24 hours. What a fantastic job all the volunteers did. Thank all of you immensely.

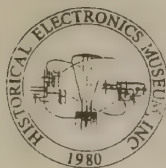
Congratulations to Murray K3BEQ for the two articles that he wrote and were published in the QST magazine. One article appeared in the December, 1996 issue and the other in the February 1997 issue. Great work Murray!

Congratulations are also in order for Debby, N5SKA in upgrading to General Class.

We would also welcome the new members that just joined.

See all of you on Saturday, February 1st 1997 at the luncheon in the Laurel Center Mall..

73's from Ken Easton N3HLY



## Historical Electronics Museum Amateur Radio Club

**Meetings:** Second Wednesday of each month, 5:30 PM, In the Historical Electronics Museum, West Nursery Road and Elkridge Landing Roads. Linthicum, Maryland (Next to BWI Marriott Hotel).

**Net:** Monday 8:00 PM, 146.67(-)/224.24(-) MHz (courtesy of BARC).

**Information:** Gary Ryan, (410) 969-0410.

**Mail:** P.O. Box 746, Mail Stop 4015, Baltimore, MD 21203.

**Street address:** 1745 W. Nursery Rd., Linthicum, MD 21090.

**NOTICE of One Month Only Change of MEETING TIME:** The meeting starting time for the month of MARCH 1997 ONLY will be shifted from the normal 5:30 PM to 6:30PM as an experiment to see if it accommodates more members. All other monthly meetings in 1997 are still scheduled at 5:30PM.

### The January 1997 Meeting

Heru Wamsley, W3WVV, was appointed HEMARC Technical Chairman for 1997.

Considerable discussion was held on the new RF radiation exposure rules when the additional VE pool questions and the one year enforcement delay was announced. Guidelines, data sheets and other information will be gratefully received by all as it develops throughout the year. Those familiar with nearfield calculations and actual measurements of the fields are most eager to see solid specific information on how this is to be done. A copy of the study of measurements made on a group of amateur stations was circulated and will be studied in more detail.



The Hands-On Training program for licensed hams on building and operating electronic equipment has been announced for a week or so now and already 5 students have enrolled. It looks very promising. For more information please call Heru Wamsley, W3WVV 410-766-3545 or Ray Robley, KD3KK, 410-859-0178.

Dean Bush, K3KHG, reported that the benches for the new W3GR operating station are black laminate and that the benches will be completed in two sections to allow installation with minimum disruption to the Museum and operations. More flexible shelving has been arranged so that regular operations, digital and ATV can all be readily accommodated.

Chuck Angle, AH3FB, reported that a complete BC-610H WW2 transmitter with crystals and tuning units has been donated by Alex Benitez, WX3Q and Walter Gugler, K0RLM. HEMARC is very appreciative of this generous gift.

Dale Cochrane, W3UG, presented the latest information the Heard Island Dxpedition details. Copies of the fascinating story and details of the planning for this very unusual amateur event were distributed and discussed. HEMARC wishes them a safe and gratifying trip.

73 de Chip, W4PBG



#### QUARTER CENTURY WIRELESS ASSOCIATION

159 East 16th Ave.  
Eugene, OR 97401-4017  
Voice: (541) 683-0987, Fax: (541) 683-4181  
e-mail: jwalsh@teleport.com  
Home page: <http://www.efn.org/~qcwa>



#### Laurel Amateur Radio Club

A Volunteer Examiner Coordinator

**Meetings:** 4th Wednesday of each month (except November & December) 7:30pm at 384 Main Street, Laurel Md.

**Social:** 2nd Wednesday of each month, except December (Call for directions).

**Nets:** 1st & 3rd & 5th Wednesdays, 8:30pm, on 147.225+, no tone.

**Mail:** P. O. Box 3039, Laurel, MD 20709-0039

**Exams:** 3rd Saturday of each month, to pre-register contact: John/WB3GXW (301) 572-5124 after 6 P.M.

**Information:** Jim/WI3N (301)725-6829 or Pud/W3YD (301)498-6293.

The Laurel ARC began its year the way many clubs do, by having the members sign up for events in which they wish to participate. Our list includes sixteen public service type events such as Main Street Festival, Montpelier Festival, cross country runs, parades, etc. There are also four club only type affairs such as Field Day, a Father's Day special event using W3DAD, the call sign of a club member, the MD QSO Party, and SweepStakes.

Over a dozen members have indicated an interest in participating in ARES, particularly with the City of Laurel. At our January meeting everyone filled out a form listing their equipment, modes they can operate, availability in the event of an emergency, and how to contact them. We are making an effort to have those interested involve themselves in their county's ARES/RACES programs. Our president, Mark/N3NTQ, is researching a CPR/First Aid class for interested members to qualify or recertify.

We'll be sending out a letter to the local hams in the surrounding zip codes inviting them to our March meeting. A special guest speaker has been contacted. He has given tentative approval for our fourth Wednesday regular meeting and we are



awaiting his confirmation. There will also be a short talk on stealth antennas, a subject near and dear to those living in housing with antenna restrictions. Laurel ARC has a great thing going and we'd really like to share it with our friends.

Our social meeting is held at Dinosaurs Restaurant which is beside Academy Ford on Rt. 1 North, near Contee Road in Laurel. This is held on the second Wednesday of each month and anyone is welcome. We begin arriving around 7:00 pm and leave sometime after 9 pm. The cuisine has some spicy gumbos and jambalayas as well as more conventional fare. I hope some of you reading this will drop by and visit with us.

73 de Jim/WI3N



### Loudoun Amateur Radio Group

**Meetings:** Third Saturday of each month at 8:30 a.m. at the El Rancho Plus restaurant. Call for directions, if needed.

**Nets:** Every Sunday evening at 8:00 p.m. on 28.360 SSB; informal get togethers at morning and evening commute times on 147.480 simplex.

**Mailings:** Loudoun Amateur Radio Group, P.O. Box 1004, Purcellville, VA 20134

**Information:** Gary Quinn, NC4S, (540)822-5690; or John Unger (540)338-4620

The first LARG meeting of 1997 was a great success. We had an excellent one on a cold Saturday morning and, after a warm breakfast and some hot coffee, we listened to Norm, AI2C, tell us how to work those elusive DX stations. Norm gave an informative talk, which covered propagation, techniques, and even some secrets, on working far-off places. He focused his discussion on the recent Heard Island Dxpedition and gave out some useful tips for putting VK0IR in your log. His presentation was enjoyed by all.

Our club had a good turnout for First Night celebrations in Leesburg on New Years Eve. LARG provided communications for the event organizers using 2-meter simplex. Paul, N4PT, coordinated the club's volunteers, who included Dale, KD4LSL; Nancy, KE4RTP; Gary KD4SRX; Norm, AI2C; Mark, N3GMW; Tom, KF4FXT, and John, W4AU. We all enjoyed helping with the celebrations as well as the food and good fellowship.

73 - John, W4AU



### The Maryland Apple Dumpling Radio Amateur Society, Inc.

**Meetings:** 2nd and 4th Thursdays - 7:00 P.M.  
NBC Building - WKYS Conference Room,  
4001 Nebraska Avenue, Washington, DC.

**Nets:** 1st and 3rd Thursdays at 9:00 P.M. on  
145.45 MHz (PL-5A).

**Repeaters:** 444.100/449.100 MHz (PL-2A),  
145.45/144.85 MHz (PL-5A).

**WWW Address:** <http://mvhsl.mbhs.edu/~fwright/MADRAS.html>

**Mailing:** P. O. Box 2468, Wheaton, MD 20902

**Information:** Larry Ziecheck - N3GKZ (301)  
984-6113, Jean Blacik N3PLC (301) 984-  
6113.

The Presidential Inauguration Special Event, which took place at the Russell Senate Office Building in Washington, DC on January 17th thru the 20th, was a smashing success. We started operating at 9:00 P.M. on the 17th and closed up shop around 1:00 A.M. on the 20th.

After reviewing our log sheets it looks like we made over 1250 contacts during the event. This was made possible by the tireless effort of our club members and friends of MADRAS. We had three stations going at all times and operators willing to stay longer if their replacement didn't show. I am pleased to say that everyone who signed up to



operate during this event not only showed up but came early just in case they were needed. Thank you one and all for your enthusiasm and support.

Several of our club members were not only operating during the event but had other jobs coordinating communications for all the other activities during the Inauguration.

MADRAS wants to extend its appreciation to W3USS for allowing us to hold this special Inauguration event at their station again. We also want to say thanks to the many W3USS members that contacted us during the operating times and wished us luck. It was great hearing from you all.

Our first trip to the post office to check on the incoming QSL cards was most rewarding. I think we filled the box with about 300 requests and will be checking every couple of days for the next several months.

Our members are already talking about doing another Special Event very soon, so we had better put our heads together and come up with something new and exciting and different. We are open to suggestions.

We are in the process of scheduling speakers and programs for our club meetings the second and fourth Thursday of the month at the NBC Building in Washington, DC. Our meetings begin at 7:00 P.M. and are open to all who are interested. Drop in and check us out when you are in the neighborhood - we welcome all visitors.

73 .... Jean - N3PLC



## Maryland FM Association

**Meetings:** Quarterly, location to be announced

**Repeaters:** 146.16/146.76, 223.16/224.76, 449.00/444.00 (CTCSS 107.2)

Attention Technical types! MFMA is changing! What used to be a repeater utility company (of, by, and for, the Jessup repeater system) will now be the a group of guys dedicated to experimenting. Actually, we have always been most interested in the technical aspects of radio, since we put up the areas first repeater 30 years ago. Times are changing and so shall we. Thirty years ago, repeaters and FM were the cutting edge of amateur radio technology, but today, after building the 146.76 system into one with eight satellite receivers, two simulcast transmitters, and cross-banding it with 444.000 and 224.76, there is little more technology to be developed in this area. Thus, our future emphasis will be in other directions, and here is where you come in. We are looking for others interested in the technical challenges of amateur to join with us for mutual support and entertainment.

Our next meeting will be the 9th of March, at the Baldwin Memorial Hall in Savage, Md. Savage is just north of Laurel off Rt. 1. Meeting starts at approx. 2 PM. Talk-in is on 146.76/444.00/224.76 repeaters. After preliminaries, the meeting is pretty informal. We just sit around and talk about our latest projects and interests. All technical topics are welcome.

Bruce, W3YVV, has indicated that he will give a short presentation on the electrical code as it relates to Hams. Heru, W3WVV, always has several projects going, from ATV to microwaves and will show us how to make waveguide out of tin foil. Bill, W3EAO, will update the status of the digital voice project along with the 9600 baud modem testing. Fell free to bring your latest gizmo for a show -and- tell. Not all topics must be amateur



Reminder - all submissions for

**AUTO CALL**

are due no later than  
the 1st of the month prior to the  
month of publication!!



radio oriented. We talk computers, GPS, 3-axis accelerometers, and speaker building to name a few. So if you'd like sit around and talk technical for awhile - join us!



## The Maryland Mobileers Amateur Radio Club

**Meetings:** First Friday of each month at the AA Co. EOC, Crownsville State Hospital grounds Crownsville, Md.

**Repeaters:** WA3PIQ - 146.805 & 449.125 both in Millersville, Md. W3VPR - 442.3 in Annapolis - Joint usage AARC.

**Social Breakfasts:** 15 days (3 Saturdays) after club mtg, at Rick's Cafe in Odenton at 9 AM.

**Mailing:** MMARC, P.O. Box 935, Severn, Md. 21144

**Nets:** 2-Meter on 146.805 @20:30 local time every Monday, 10-Meter CW practice net @19:00 Monday on 28.230 MHz.

**Information:** Brian Fitzpatrick, N3QXW (President). Bill Ziegler KA6TYY (410) 987-2384.

### MMARC HOLIDAY SWAPFEST 97

I want to thank all of you who supported the MMARC's Swapfest. The weather was perfect and we had about 600 people attend. We had a good variety of vendors and there were some good bargains, maybe you were lucky enough to get one!!! If you missed out, mark your calendar for next year on Super Bowl Sunday. It's a great way to start the day!!!

### ANNE ARUNDEL COUNTY ARES TRAINING MARCH 8TH

The Anne Arundel County ARES plans to have ARES Training on 8 March at the Emergency Operation Center in Crownsville, MD. The training will last about four hours and there will be a photo ID session for all ARES members who

don't already have ID Cards. This is an excellent way to start learning about ARES and meeting some of the participants. Call Brian/N3QXW at 437-4713 or myself for more information. Talk-in will be on the 146.805 Repeater.

### FEBRUARY MMARC MEETING

I want to thank Jim McCoy/N3EI for his excellent presentation at February's club meeting. He educated us on the New Maritime Emergency Communications System. With many hams also having boating as a hobby, this presentation helped keep us up-to-date on the maritime community.

The club also discussed upcoming events. On Armed Force Day in May the Club will operate a special event station on the USS TORSK located in Baltimore's Inner Harbor. If you ever wonder what it is like to be at the other end of a pile-up, this is a great chance to find out. It also is a great chance to promote amateur radio with the tourists that look on as they visit the submarine. Please mark this date on your calendar and I will pass more about it next month.

Field Day was also discussed. Ken/N3OPI will head up field day again this year. We will be located in the same spot at Downs Park in Pasadena, MD. Field Day is an emergency preparedness contest sponsored by the ARRL. It is held on the last full weekend in June. I hope to see you there.

### MMARC CLUB WEB PAGE

The MMARC now has a web page. Check it out. It is located at <http://www.erols.com/wb3v/mmARC>.

That's it for this month. Please note our club meeting, breakfast and net times. We would be happy to meet you and share some good "Ham Stories"!! Don't hesitate to use our repeater if you are in our area.

73, Bill, KA6TYY





**Metrovision  
Amateur TV Club**  
Fast Scan Color ATV

**Meetings:** Quarterly: Time and place TBD.

**Repeater:** WA9GVK/4 (video/audio) Input: 425-431 Mhz. Output: 438-444 Mhz. Accessible 144.970 Simplex FM Voice.

**On-the-air:** Sundays and Wed. 8:00 P.M.

**Mailing:** Metrovision, Inc., 3422 Silver Maple Place, Falls Church, VA 22042.

**Information:** Sam - N3GHY (301 430-3373)

Jim - KA4CKI (703 494~342)

Tom - KO40X (540-752-2100)

Rich - KA3BTD (301-843-1253)

My son Rick-KA8SPV is actively putting together our ATV web home page. As soon as I know the home page web address I will publish it.

Tom-KO40X is in the process of putting a 1200 and 900 megahertz ATV system together in the Woodbridge area and hopes to link to Metrovision's repeater. Tom who lives in Hartwood Va. said there is a lot of interest in ATV down in that area.

The Metrovision repeater has been putting out great pictures lately, probably due to the cold weather. Those wideband RF amplifiers definitely like the cold weather. I was reading my Amateur Television Quarterly magazine and came across an article that was of interest to me. The article was about putting a ccd chip camera and a small 70cm transmitter in an R/C car. The pictures shown looked like the real thing. I'm considering doing the same thing now. Of course we do show our VCR tapes over the air as it makes great viewing.

Metrovision will reach a milestone this year as we will celebrate our 25th Anniversary being on the air. I've been a member only 4 or 5 years but am excited to celebrate with the old timers. Bruce Brown -WA9GVK petitioned the FCC in

1972 to install and test the worlds first ATV repeater and had to petitioned them for 8 second time to keep it on the air on a permanent basis.

"I'll be seeing you" 73' Rich-KA3BTD



**The Mid-Atlantic  
DX and Repeater  
Association**

**Meetings:** Second Thursday of each month, rotating locations among Hagerstown MD, Frederick MD, Martinsburg WV and Greencastle PA.

**Net:** Tuesday evenings at 1930 local on 147.06.

**4 State10M net:** Wednesdays at 2000 local on 28.315.

**Repeaters:** Frederick MD: 147.06, 224.20, 448.125; Martinsburg WV: 147.345.

**Mailing:** 230 North Potomac St., Suite 2A, Hagerstown MD 21740

**Information:** Voice BBS 301-416-8447 (info Box 112) LandLine BBS (301) 416-8435

Are you getting the MADRA Bulletin? If you're a member with an Internet address, you should be. If you're not a member and have an Internet address, you may receive it if you wish. In either case, just send an Internet e-mail message to MADRA at our new club address: <madraclub@aol.com>. If you'd like to get your Bulletin via SnailMail, just add \$5.00 to your dues check when you send in your renewal application.

So, what's been happening with MADRA, you ask. First of all, MADRA did not disappear in February. I just failed to get the column to *AutoCall* at the end of December.

In January we held a nice Holiday Banquet. Predictions of snow and ice caused us to shift the date from December 19 and we met at Old South Mountain Inn on January 4. Then we had a good



dinner and monthly gather at Red, Hot and Blue in Frederick the following week.

In case I miss another deadline, let me give you this list for the rest of 1997:

March - Cozy Restaurant, Thurmont  
April - Mt. Airy Brewing Company, Mt Airy  
May - Red Hot & Blue, Frederick  
June - Roys Place, Rockville  
July - Brewers Alley, Frederick  
August - Richardson's Restaurant, Hagerstown  
September - TBA Martinsburg area  
October - Red Hot & Blue, Frederick  
November - Mt. Airy Brewing Company Mt. Airy  
December - TBA

Just remember that these meetings always start at 7PM on the second Thursday of the month.

Lots of action has been taking place on the repeater front. Antennas, towers and controllers have received some working over during the cold days of winter. Noisy times on the Frederick 2M repeater (147.06) still don't seem to have a pattern. Turning on PL tones to see if that helps was in the works as this column was being written.

And...lots of action is in view for the next few months. We had a great time with the Brunswick ClubHouse for Kids (elementary) showing Ham Radio and relating it to their Career Days program.

We knew that a lot of the astronauts were led to technical careers by their Ham experience. What about Chet Atkins and Bon Jovi? We plan to give a bigger and better Career Days demo to the middle school clubhouse.

Then there are some shopping mall demos going on the schedule, in Frederick, Hagerstown, Martinsburg and...any recommendations? Please feel free to check in on our nets (see column head) and you may find that MADRA has come up with some ways to make Ham Radio fun again.

73 DE N2CSQ/3



## Montgomery Amateur Radio Club

**Meetings:** 1st and 3rd Wednesdays of each month at 7:30 p.m., Executive Office Bldg, Montgomery Co. Govt Center, 101 Monroe St, Rockville. Park in underground lot G-2.

**Repeaters:** 146.955 (-600) & 442.750 (PL 156.7) in Rockville.

**Club Net:** Every Sunday night at 7:30 PM, on the MARC repeater.

**Internet:** <http://www.dsport.com/marc/>

**Mail:** MARC, P.O. Box 611, Gaithersburg, MD 20884-0611

**Information:** Jeff - KZ3F (301) 258-0112

**Training:** Ms. Rocky Jones (301) 216-5210

### 30 Years as an ARRL Chartered Club!

On April 16th, 1997 the MARC Club will have been an ARRL Chartered Club for 30 years! How time flies! 30 years later we have grown to a 300+ member club with a variety of technical, social, training, and special events. We are planning our 30th anniversary celebration for this special event.

### Here's our plan:

**Who:** All MARC Members, Family, and Friends!

**Date:** April 16, 1997 **Time:** 7:00 p.m. **Place:** Golden Bull Restaurant, Rt. 355, in Gaithersburg

**Dress:** Semi-Formal. **Door Prizes:** You Bet!

**Menu:** Dinner buffet: Steamship Round of Beef, Breast of Chicken Supreme with rice, Fried Flounder, peas & onions, fruit salad, scalloped potatoes, green salad, ice cream, coffee, tea, soda.

**Cost:** \$23.00 Adult, \$11.50 for Children 12 & under

**Contact:** Howard Gorden - W3CQH Montgomery ARC - 30th, 11011 Brandywine Street, Kensington, MD 20895-1500.

**Deadline:** March 19, 1997 (2nd MARC Meeting) Please don't delay! See you there!

73, AI - NW2M





## National Capital ARES Council

Fifty seven amateur radio operators took part in the second ARES Institute training program held at the Virginia Power Building on Saturday, December 7th.

The National Capital ARES Council (NCAC) structured the training to include an introduction to the SKYWARN program, an introduction to directed net procedures and the incident command system with exercises, an introduction to National Traffic System (NTS) message processing with exercises, and an introduction to portable packet field stations and "go kits".

All participants were given a free gel cell battery for a power pack with instructions on the use of the ARRL recommended MOLEX connectors.

Supplemental funding to conduct the institute was provided by a grant from the Foundation for Amateur Radio (FAR). A small registration fee covered lunch expenses.

The attendees were generally enthusiastic and attentive. According to Jeanne Rexroad, N4ZGI, NCAC President, the third ARES Institute to be held this Spring in Maryland is now being planned.

The NCAC has a weekly directed net at 9:00 pm local time on 146.91 MHz (the NVFMA Tyson's Corner Virginia repeater). All are welcome to check in for a discussion of current emergency and public service activities.

Submitted by Lenny Schachter, N3RPQ,  
NCAC Secretary/Treasurer.



## Prince George's Wireless Association

**Meetings:** First working Tuesday of each month, 7:30 PM; American Red Cross bldg., 6206 Belcrest Rd, Hyattsville, MD 20782.

**Club Station:** K3CEZ

**Mailing:** 4109 Kennedy St., Hyattsville, MD 20781

**Information:** Frank Holton - WA3ZMW  
(301) 927-1245

Each month the members of PGWA have been meeting for dinner before the regular business meeting. So on Tuesday, January 7, 1997 we had dinner at the Hot Shoppes restaurant in Prince Georges Plaza in Hyattsville, MD.

Following dinner, we returned to the K3CEZ radio station located in the American Red Cross Bldg. also in Hyattsville. The meeting began at 7:45 P.M. brought to order by Frank, WA3ZMW.

After the meeting adjourned we had a brief demonstration by John Emler, N3RQZ, with his portable GPS unit. Very interesting piece of equipment.

Besides PGWA's packet system, we also have a new 486 computer that was donated to the radio club from Frank, our President, WA3ZMW. Just recently we installed Windows 95 and Dave Black, WB3KXL demonstrated some of the information on that program to the members.

All in all it was an interesting get together. See you Tuesday, February the 4th, 1997.

73s, Ken Easton N3HLY





## Quarter Century Wireless Assn. Chapter #91

**Meetings:** Neighbor's Restaurant, Cedar Lane and Park Street, Vienna, VA; third Saturdays; Noon. Business/Program Meetings: Odd-numbered months. (Come at 11:30 to chat; program begins at noon.) Informal/Ragchew Meetings: Even-numbered months.

**Newsletter:** Bi-monthly to all members.

**Information:** Dick Rucker (KM4ML), Secretary; 10426 Darby St., Fairfax, VA 22030-3603; 703-591-3279. Also on the VHF net.

**VHF FM Net:** Sunday 9 AM, 146.79MHz.

January 1997 Meeting — The main speaker for this meeting was national QCWA President, and long-time Chapter 91 member, Jack Kelleher (W4ZC). Jack told about his experiences as a professional “brass pounder” during the ten year period from 1932 to 1942.

Jack got started in radio using a Ford spark coil to “communicate” with neighbors, then got serious about learning the code by copying commercial stations near the 40 meter band (most notably XDA in Mexico City and HPC in Panama City). Jack received his first Ham call, W2DSV, in 1932.

Jack enlisted in the US Army in 1932 and was trained as a CW radio operator at Fort Monmouth, NJ. After this training he was posted to Fort Sam Houston, TX. There, six to eight operators worked a CW net that included Washington HQs, several stations in the 8th Corps area, and two stations handling military air traffic progress reports. Messages were sent using a bug at up to 40 wpm.

In 1934, Jack received further training at the Army-wide radio school at Fort Monmouth. One of his tasks there was to transcribe inked paper tapes that contained intercepts of messages transmitted by the Japanese. These were in the Japanese version of the Morse code, also known

as Kata Kana.

Jack returned to Ft. Sam Houston in 1935. Message handling had become more automated by then: a Kleinschmidt machine punched paper tapes which were then read by a Boehme keyer. This automation raised the transmission speed to around 50-55 wpm. However, the copying was still done by ear. Telegrapher's typewriters (Underwood Model 5 “mills” (all caps)) were used for transcription.

The War Department net was a de facto training ground for commercial operators in such organizations as RCA Communications (RCAC), Mackey Radio, and other commercial concerns. The salaries provided by these civilian employers was much better than those provided by Uncle Sam, so Jack left the Army and joined RCA as an international radio operator.

At RCA, 20 or more operators handled traffic to all continents except the Far East; there also were a dozen circuits to major stock-market exchanges worldwide. The operating room in downtown New York City had VHF links with transmitters at Rocky Point and receivers at Riverhead (both on Long Island).

Jack said that when conditions were good, it was not uncommon to receive traffic manually at 60 wpm. Also, the number of errors permitted an operator during a one-month period of eight-hour shifts was one; yes, one error per month at 60wpm! Jack said that if was reported that an operator made more than one error per month, he was invited to have a little chat with his supervisor.

Circa 1939, RCAC established domestic circuits between major cities in the U.S. These circuits each had four multiplexed channels on one radio frequency. Transmissions utilized a sevenbit digital code; keying and copying were fully automated. When the receiving decoder detected a parity error, a Maltese cross symbol was printed. The attending operator then would manually request a retransmission. This automation was “the



beginning of the end" for manual CW operators.

Vic Clark Chapter formal 1997 budget.

Jack left RCAC and returned to the Signal Corps labs in 1940. There he was involved in the development of VHF FM equipment for military vehicles.

In 1941, Jack was assigned to a White House detail involved in modernizing President Roosevelt's protective communications. In 1942, President Roosevelt made a tour of defense plants by rail. Jack helped equip a B&O Railroad baggage/passenger car with HF and VHF radios and antennas for this tour. Jack was the CW operator on this tour, and reminisced that the receivers used on the train were a Hammarlund Super Pro and a BC-342.

Jack's "warm-up act" was John Willmuth, (NQ4Q), who gave a brief presentation about QRP. John showed his first QRP rig, a handsome homebrew transmitter constructed in a pipe tobacco can. John's next station was a Heathkit HW-8. Its first contact? A station in Finland!

**Auction** — Vice President Al Wheeler (WB4JJJ) conducted the not-to-be-missed auction and related events. These brought in \$63.00 for the chapter!! Many thanks to Nelson Seese (W4BHD) and Dick Rucker (KM4ML) for donating auction items.

This meeting was attended by 31 members and guests, including three members of Chapter 23: Stan Brigham (W3TFA), Brian Greene (W3CQE), and Walt Rader, (WA3DUF). We opened with each member and guest giving a self-introduction and telling a bit about one of their hobbies other than Ham radio. Some very interesting talents were discovered!

**Chapter Reports** — Secretary Dick Rucker's (KM4ML) minutes of the previous business meeting were approved. Dick announced that member Bill McAninch (W4IIA) had become a silent key in January 1996. Treasurer Al Cammarata (W3AWU) distributed copies of the

President Frank Haynes (W4NUA) noted our chapter will be active at the Vienna, VA, "Winterfest"(TM) in February.

ar 73 de Jim, W3WV



## Shenandoah Valley Amateur Radio Club

**Meetings:** First and Third Friday of every month at 7:30 p.m. SVARC Club House 2921 Grace Street, Winchester, Virginia.

**Repeater:** 146.22 In/ 146.82 Out.

**Net:** Shenandoah Valley Emergency Net (SVEN) 7:15 daily on 146.22/146.82 Repeater.

**Mailing:** P.O. Box 139 Winchester, 22604.

**President:** Fred Wetzel (W4KRT).

**Info:** Irvin Barb, W4DHU, 955-1745.

**Internet home page:** <http://www.w3ic.com/inet/svarc>.

The SVARC club house is now open on Tuesday nights for training programs. Thanks to Tom KD4WSM we have had 3 great programs so far.

The first week Bo KE4SQZ instructed the net controllers on the correct way to run the SVEN at 7:30 each evening.

The next week Bill W3IHZ and Fred W4KRT taught the proper way to install connectors to coaxial cable.

The following week was on building J poles taught by Stan KD4HRJ, Irv W4DHU and Rick N3HXT.

We have had a good turn out for these classes and intend to continue them.

73 de Wayne KE34PMS





## Southern Maryland Amateur Radio Club

**Meetings:** 2nd Friday of each month at 1930 ET at the PG County Police, Clinton Station, 6707 Groverton Drive, Clinton, Maryland.

**Nets:** Tuesday at 2000 on 147.15+ Repeater; Wednesday at 2000 on 1.865 (+/-QRM); Thursday at 2000 on 28.447 USB.

**Repeater:** WA3YUV/R 147.15+, Brandywine, Md. Autopatch to 911.

**Mailing Address:** P.O. Box 273, Cheltenham, Md, 20623

**Information:** Vic (WA3YUV) & Linda (KA3VNI), (301) 888-1388.

**Internet:** <http://www.iscanit.com/smarc>

It's absolutely amazing how the time just flies. It seems just like yesterday that we were trying to dig ourselves out of tons of snow from back to back snowstorms. Lucky for us Mother Nature is giving us a break. January was certainly different this year. It certainly brings thoughts of fixing those antennas that time has worked on. I for one certainly hope that we get a string of nice days that I can finally get a couple of "hidden" antennas installed. It is a shame that we don't have the clout to fight the restrictive covenants that come with nearly every home these days.

If you missed the January meeting, you missed a real treat. Vic, WA3YUV, brought in his service monitor and other test equipment to check and align the Ht's of members. He was a very popular guy that night. Interesting point was that only 2M rigs were brought in for checking. One of the best kept secrets around is that the 440 band has quite a number of repeaters in this area which are no where as crowded as those on 2. You may recall from earlier articles that we are working on a SMARC 440 repeater. It is now in test operation at Vic's, awaiting a permanent home. Now that the 2M repeater is in a fantastic location, our attention will

shift to getting the 440 up permanently. Check 440 out and let me know how you like it.

Things have been relatively quite these days around southern Maryland. Our new leadership is just beginning to get learn what they got themselves into this year. With spring just around the corner we will be starting up our outside activities. Stay tuned for the latest news!

And that is the big news from southern Maryland. Don't forget to join us for the monthly eyeball meeting at the Police Station. Be very careful out there, and we will see you again next month.

73, Greg - WA3FSC, SMARC PIO



## St. Mary's County Amateur Radio Association

**Meetings:** Fourth Thursday of each month, 7:30 PM, at the Lexington Park library.

**Repeater:** K3HKI (146.64 MHz)

**Packet:** K3HKI.#SOMD.MD.USA.NOAM (145.75/145.01/223.58/440.975 MHz)

**Lunch Bunch:** Every Friday, listen on the 146.64 MHz repeater between 10-11:30 AM to find out where to meet.

**Nets:** - "St. Mary's ARES", every Monday at 8:00 PM on 146.64 MHz - "Bottom County", every Wednesday at 8:00 PM on 146.64 MHz.

**Address:** SMCARA, P.O. Box 743, California, Maryland 20619.

**Newsletters:** Complimentary copies are available at local Radio Shack stores.

The Saint Mary's County Amateur Radio Association has scheduled a Winter Dinner. We plan to get together to share our experiences in amateur radio. This is the first major event for 1997. In a recent SMCARA newsletter, Al, KJ3E, reminded us all how vulnerable the amateur radio privileges are. With frequency auctions yielding



billions of dollars of revenue, it is clear that WE are nearing a "use or lose" position. We all have the responsibility to become involved. With 1997 being Public Service Year in amateur radio, the time is right to reach out and offer your communications skills. Get in touch with your county Emergency Coordinator, join ARES or RACES, or check into one of the NTS nets in your area. There are many ways to be active. SMCARA has groups of individuals who are active in many different aspects of amateur radio.

73 See you all next month  
KE3OX/Mark



### **Sterling Park Amateur Radio Club**

**Meetings:** 8:00 P.M. - Third Monday of the month except July and August at Sterling Community Center Annex, Church Rd. (Rt. 625) near Route 28, Sterling, VA.

**Mailing:** Call Box 599, Sterling, VA 20167.

**Information:** Bill Lorentz, KS4II, 703-444-6341 or via email KS4II@AOL.com.

The club would like to thank Ace Jansen, N3AHA, for providing us with an excellent presentation on the ins and outs of County Hunting. Ace, who has contacted all 3,076 US counties, "encouraged" all of us with the fact that if we started today and contacted one county each day it would only take eight and one half years to contact all the counties. He then proceeded to educate us on how to utilize the County Hunter Nets and other techniques to greatly reduce this time. We were pleased to see that Ace along with our vice president Howard Dotson, KF4BCU, made the front cover of the February *Auto Call*.

The January club meeting was attended by eighteen members and guests. Forrest Snyder, N4UTY, and Ray Wilson, N1NUH, were Elmering the students in the current SPARC Novice/

Technician training class and absent from the meeting. We missed both of you, but look forward to your return with a new group of hams in March. We discussed several upcoming events at the meeting and concluded with refreshments while we watched the ARRL video about AMSAT 3D.

The 1997 Virginia QSO Party Contest will be held March 15-17, 1997. Contest logging software is available free of charge and may be requested at the email address below. The Contest Committee does not warranty the software in any way. We do ask that if you use the software that you register it so you can be notified of any updates. Additional information about the contest will be in the March issue of several publications or may be obtained from the Contest Committee at Call Box 599, Sterling, VA 20167, or via email to KS4II@aol.com.

73, Bill, KS4II



### **The Middle Atlantic FM and Repeater Council, Inc.**

**Meetings:** Coordinating Committee (CC) normally meets the last Monday of each month, 19:30, in the OEP conference room of the Prince George's County Emergency Operations Center off Central Avenue. Talk-in on 147.18.

**Address:** P.O. Box 1022, Savage, Md. 20763-1022 for all correspondence.

**Web Page:** HTTP://WWW.T-MARC.ORG.

**Information:** President - Owen Wormser K6LEW (703)684-7682 CC Chairman - Bill Conaway W8HNT, Pager (703)741-4251. Ombudsman - Jim Erickson K3LFO (410)549-1041, K3LFO@APEXGRP.COM.

Please refer to the separate article in this issue for information on proposed revisions to the 2 Meter and 70 CM band plans, which are intended to provide more channels for digital operation, and



to alleviate some of the interference problems ATV'ers are having at 441 MHz. Comments on this proposal are welcome. Please send them to T-MARC at our P.O. Box or our E-mail address by the end of this month.

Newly coordinated is N3MVL's proposed 448.225 machine at Hagerstown. Reordinated repeaters at new locations include the Melpar ARC's 444.300 machine now at Falls Church, and KA3ZAN's 448.075 repeater NE of Baltimore. Repeater callsign changes include the Waldorf, Md., 145.35 repeater which now sports their new club call KB3BOI, and NVFMA's 146.79 repeater is now ID'ing as K6LEW. The PROS' K3SVA 442.950 repeater at Trappe, on Maryland's eastern shore, is down due to a controller failure, and was given a 3 month extension to get it back up. A couple of UHF link frequencies were changed in southern Maryland due to radar interference.

2 Meters is full and 440 is almost full in the greater metro area. So, Bill W8HNT, our coordinating committee chairman, has some "food for thought" for existing and prospective new repeater sponsors and for repeater users:

First, if you now operate a repeater which has little usage, please consider giving the frequencies up for some group who is looking for a pair for a new machine. You can probably move your small amount of usage onto some other repeater with little difficulty.

Second, ask yourself if you REALLY NEED

that new repeater! In most cases, your activity would be welcomed on some existing machine - most sponsors are happy to share their repeaters. Just remember to be sociable, polite and civil when using their machine!

Third, consider adding CTCSS on your input if you have any kind of nuisance or accidental interference problems. Most radios built in the last 10 years or so, have tone encoders built-in.

Fourth, simplex can work much better than many people think. If you can communicate on simplex, don't tie up a repeater!

And finally, don't rely on a hand-held as your only radio. They are wonderful, but you should never rely on someone else's repeater to make up for inadequacies of your own station - have both fixed and mobile equipment which can communicate well on simplex, so if the repeater goes down, you're not "dead in the water"!

Building, maintaining and controlling a repeater is NOT a simple or inexpensive undertaking! Ask any repeater sponsor. If you plan on building one, expect to spend lots of time, money and effort. And once it's up and running, you can't just walk away from it. It will require maintenance, and the licensee/trustee is expected to maintain some control over its use, which is not always a popular or pleasant experience! Forwarned is for-armed!

73, Gary, W3DTN, T-MARC PIO

## Special Event Operation

**Floyd, Virginia** -The Foundation for Amateur International Radio Service (FAIRS) will operate FAIRS Club station N4USA, US5WE, BY1QH, 8R1WD and S21AM on May 10th and 11th to celebrate the 6th anniversary of FAIRS. General portion of 40, 20, and 15 meters.

For certificate send QSL and 9x12 inch SASE envelope to:  
**FAIRS P O Box 341 Floyd Va. 24091**



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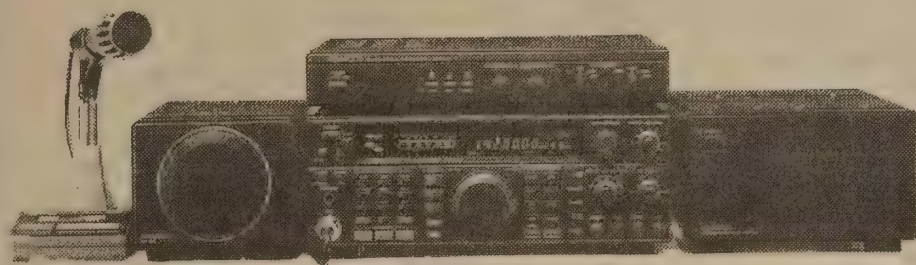
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**FOR SALE:** Tektronix Model 454 oscilloscope in very good mechanical and operating condition. Complete with two probes, pedestal cart and original manual. \$150.00 obo. Ernie Farkas, K3CBW, Catonsville, MD (410) 747-1377. [03/97]

**WANTED:** For museum, pre-1980 micro-computers, magazines and sales literature. KK4WW (540) 763-2321, (540) 231-6478. [02/98]

**FOR SALE:** KAMPLUS TNC, all mode, version 7.1, new in box, \$230.00; Kantronics software

(PC), new in box, \$65.00. Take both for \$275.00. Call after 3/12. Lois, NX7V (301) 438-8782. [03/97]

Want a history of your call? Name and address of prior holders since 1913 for \$20. Bob Arrowsmith, P.O. Box 166, Annandale, VA 22003. (703) 560-7161. [03/97]

**FOR SALE:** Home in Greenbelt, MD. + ham tower. 60 ft. Rohn SSV, self supporting tower installed to commercial specifications. Mosley 67B six-band beam installed on top and a Hy-Gain Tailtwister rotor. 4 br 2 bath brick home in immaculate condition. No extra charge for ham tower. Call Phyllis Newman (Re/Max Professionals) 1-800-435-9001. Priced in the mid 100's. [04/97]

**FOR SALE:** HP handheld multimeter model E2373A, 4-digit & analog display, \$45.00. HPAC-vacuum tube voltmeter model 400A with spare tubes, \$25.00. HP attenuator set model 350A, \$20.00. All test equipment in good to excellent condition and include operating manuals. ARRL antenna book, \$10.00. Various manuals & cookbooks e.g., TTL, IC-OP AMP, CMOS, etc.



\$1.00 each. Richard Wallace, K3TND, (301) 384-6366. [04/97]

**FOR SALE:** Ten-Tec Titan 425 amplifier, 10-160 meters. New, never used. \$2500. Bill Poole, W4VAD, (540) 373-7283, jwp@flstarweb.com. [03/97]

**WANTED:** Apple I microcomputer for museum, KK4WW. (540) 231-6478 / 763-2321. [06/97]

**FOR SALE:** SGC Smart Power Cube, 500 watt amplifier with fuse and 2 PS-50 power supplies, \$1500. AEA IsoLoop 10-30 antenna with IT-1 Isotuner, \$350.00. (703) 938-1329. [03/97]

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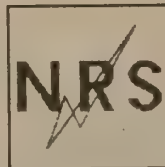
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[SWP]



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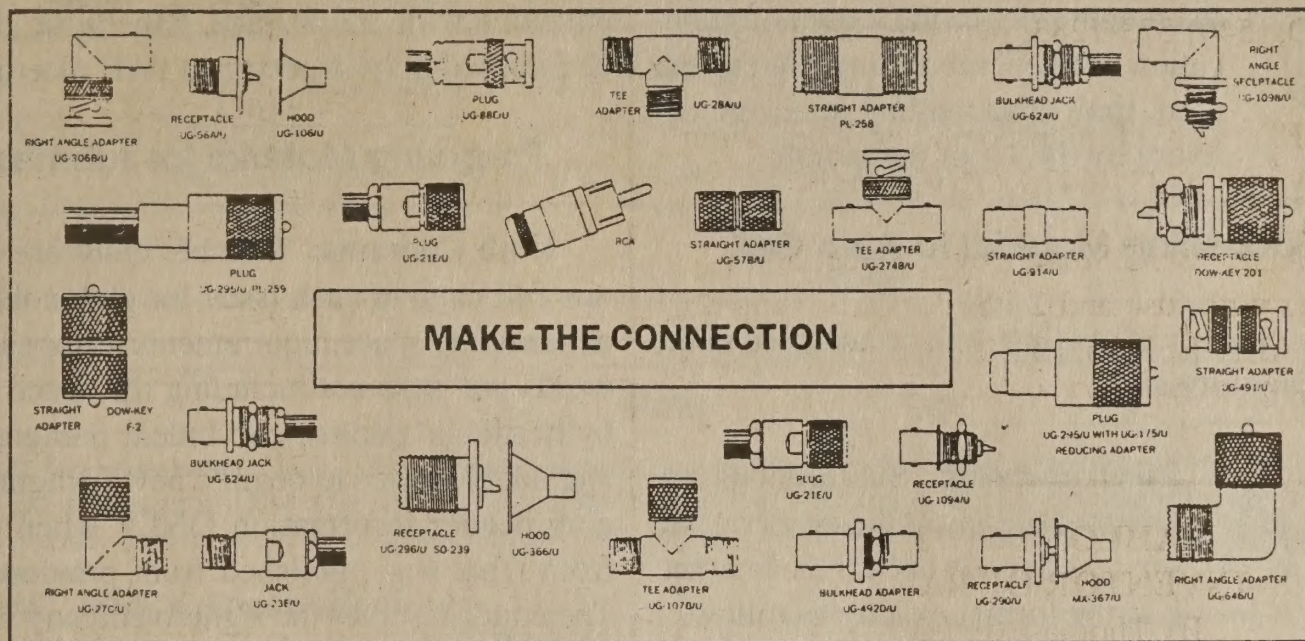
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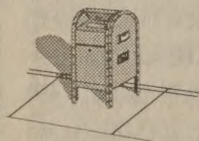
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**Regular Mail:** Mail typewritten or computer generated hard copy to: John Queen, Editor, *Auto Call* Magazine, 755 Woodland Way, Owings, MD 20736. Ensure that your printed material is dark enough for scanning.



**Computer Disk:** Submissions are accepted on 3.5" or 5.25" computer disk, in either Macintosh or MS-DOS format, using Word, WordPerfect, or standard ASCII text files. Write your name, telephone number, and club name on the disk. Submit graphic files (club logos, etc) in an EPS or TIFF format. Please verify the readability of your com-

puter files before sending. If you want your computer disk returned immediately, include a SASE envelope with .32 postage. Otherwise, disks will be returned only in person at FAR meetings.

## Preparing Material for Submission

**Club Columns:** Member clubs are allocated one full page in each issue for club columns. In determining space requirements, figure about 700 words per page not including the space taken up by headings, photos, etc. Indent paragraphs .25" and double space to begin a new paragraph. Send club header information ONLY when different from what was published from previous month. The editor reserves the right to edit any submitted material for space, content and/or applicability.

**Hamfests/Events:** Member clubs are allocated one full page per year to promote one club sponsored hamfest, convention, or special event. Submit clean black & white camera ready copy only by mail. Master copy should be in black ink on white paper and should be in proper page ratio, (Copy space is 7" wide by 9" high). Copy can be reduced or enlarged as necessary. Electronic submissions of Hamfest ads will not be accepted.

**Photographs:** The editor will select the best photograph submitted for the cover each month. Photographs should depict club members, club stations, or amateur radio related events that are current and noteworthy. Clubs may also submit photographs for inclusion with their club column. Photographs will be used in columns when space permits. Either B&W or color photos can be used. For each photograph submitted, write your name, phone number, and club name, along with a description of the photograph on a piece of paper, and tape it on the back of the photograph. Do not write on the back of your photo. If you want your photos returned immediately, include a SASE envelope with sufficient postage. Otherwise, photos will be returned only in person at FAR meetings.





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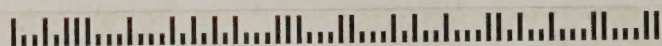
# Area Club Meetings - March 1997

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
 <b>HAPPY ST. PATRICK'S DAY!</b>						<b>1</b> Green Mtn.
<b>2</b>	<b>3</b> DOSARC	<b>4</b> Antietam PGWA	<b>5</b> BARC Montgomery	<b>6</b> Anne Arundel	<b>7</b> Mobileers Shenandoah	<b>8</b> North Point
<b>9</b> Metro Comm	<b>10</b> Carroll Co.	<b>11</b> Leisure Fauquier Frederick Woodbridge	<b>12</b> FAR - VA HEMARC Exp Post	<b>13</b> MADRAS Mid-Atlantic Mt. Vernon	<b>14</b> VOA Vienna So. Maryland Alexandria	<b>15</b> Capital City QCWA 91
<b>16</b>	<b>17</b> OVHA Sterling Park	<b>18</b> Antietam Arlington	<b>19</b> BARC Montgomery Goddard	<b>20</b> Anne Arundel	<b>21</b> Shenandoah	<b>22</b>
<b>23/30</b> Adventist	<b>24/31</b> Green Mtn. T-MARC	<b>25</b> Columbia	<b>26</b> Laurel Carroll Co. Exp Post Moose	<b>27</b> MADRAS St. Mary's	<b>28</b> Central MD Vienna	<b>29</b>



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